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The present book is the outcome of many years of meditation and of personal contact with creative artists. It was begun in the thirties and interrupted by the preoccupation of the war-time years. Profoundly dissatisfied with the usual muddled thinking on the subject of Aesthetics the writer is exceptionally well qualified to bring order into a subject which has become the bastard of philosophy and the outcast of science. Trained as a philosopher, his work on the Philosophy of Value was recognised as an important contribution to this branch of philosophic thought. In his work on Aesthetics he attempts to lay the basis for a fuller understanding of this field of human enjoyment by a careful analysis of the processes of appreciation and by a detailed investigation of the objective qualities of those things which are found to be beautiful. The author does not claim that his book says all that is to be said about the Theory of Beauty, but is content if, by analysing the meaning of beauty judgments, it will serve as a starting point for a new and more profitable study of aesthetics and art criticism.

THEORY OF BEAUTY

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He that worketh in ignorance worketh more
painfully than he that worketh with understand-
ing; therefore let all learn to understand aright.

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INTRODUCTION

IN the long years that mankind has intermittently honoured the creation and enjoyment of beautiful things for refreshment of the spirit amid more clamant cares of life, understanding of what beauty is has not advanced. We have a voluminous and growing literature of aesthetics to-day but no more sound sense and certainly much more nonsense is spoken and written about the beautiful than in the age when Plato lived. Nor have we any conviction that the study of beauty, like a young and vigorous science riotous with the fresh turbulence of a fecund adolescence, is growing up to gravid maturity. We are far more self-conscious about the beauties of the arts than were those men of the past when the artist and craftsmen were one. But we are extirpating beauty from the plenishing of our lives and nothing is now prized for beauty unless it is labelled art. The spontaneous sense of beauty and the love of fine craftsmanship have fallen casualties to the passion for specialization which rules in our modern world. In the orgiastic cult of technocracy we have castrated our spirits of wonder and delight and we resort to cinemas and psycho-analysts as men once frequented the priests to cure the impoverishment of our souls. Meanwhile the aestheticians, the professional students of the beautiful, convince neither others nor themselves. And the critics of literature and art, with no firm principles to guide them, hold blindly aloft in the darkness a leaky lamp whose flame is doused.

Aesthetics is a junior among the formal sciences. It was begotten in the middle of the eighteenth century by Baumgarten, who found a gap in the current curriculum of knowledge and inserted into it the study of sensory perception, a weak sister of the logical intellect. Immanuel Kant classified apart the practical employment of sensory experience when it provides the raw material for empirical knowledge and the 'disinterested pleasure' we some-

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times take in sensation for its own sake. From the former developed the psychological and philosophical study of perception and from the latter the study we know as aesthetics. Kant's immediate successors, led by the poet Schiller, carried aesthetics into the realm of axiology, distinguishing between the values of satisfied desire and the aesthetic values of sensory experience and the imagination cultivated 'free from will and desire'. From that time to this it has remained a commonplace uncriticized and unquestioned by all schools of aesthetics that the disinterested pleasure—whatever that may be—or the approved emotion experienced when a work of art impinges upon the awareness of a percipient is the only valid criterion of its beauty. Thus the study of beauty has been bankrupt from its beginning. For if there is one thing more certain than another it is that, as logic is everywhere one and the same for all, so tastes differ from man to man and there is no empirical uniformity among men's pleasures or the things which inspire in them emotions of which they approve.

We have to-day the metaphysicians of aesthetics, blatant or furtive, who pontificate about the status of Beauty in the ultimate of being but do not deign to further our understanding of this concrete beauty and ugliness which engage our interest in the terrestrial world wherein we live. It is as though they would prove to us that unicorns are divine but were unable to instruct us about the habits and distribution of unicorns and left us unable to recognize a unicorn when we met it in our dreams. There are others who have converted aesthetics into a psychology or sociology of the emotions, some telling us of their physiological conditioning, others of their moral ranking and others again how they may be balanced, harmonized and integrated among themselves. There are some who work only in the psychometrics of perception. Still others have frankly abandoned aesthetics for the history or sociology of the arts. All have lost their hold on beauty and have degraded aesthetics from an autonomous study into a subsidiary branch of some other science.

In this work we seek a way out from the impasse by re-examining and remoulding the fundamental assumptions which aesthetics has inherited from its past.

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Our lives are lived in subservience to the senses of taste and touch and to those somatic sensations whose reverberations through the organism penetrate to consciousness as emotions and moods. To the gratification of these elements of experience all our practical endeavours are directed. The visual and aural senses are keener and more acute than the rest and their function is to serve the rest. They are our main instruments, with the intelligence which has developed from them, in the manipulation of the external world of causality in which we have our being. We do not, in everyday practical life, indulge sight and hearing for themselves but we use them as detecting instruments of precision. And the purpose and goal of all our manipulations are to secure a preponderance of those tactile, gustatory and somatic sensations which we prefer. This is not an indictment but the recognition of a fact and an inevitability. For man too is an animal and the first aim of all his striving must be the preservation of the vital organism which his spirit inhabits, while his second goal is its pleasure and comfort.

But man, unlike all other animals, having developed gifts and aptitudes in the cause of preservation, can devote himself to the cultivation and perfection of his own powers beyond the compulsion of any ulterior goal. Throughout the history of the race most of the human energy which was superfluous to the struggle for survival has been directed to the exercise and enlargement of capacity for its own sake. Bodily powers and skills have been acquired with unbelievable expenditure of effort and endurance for the sheer satisfaction of their exercise and perfection, as young men still deny their appetites for pride in successful performance at the oar. The faculty of reason has been harnessed to philosophy and mathematics for the sheer joy of exercising and enlarging the reasoning powers with no practical purpose served. And there are within us certain emotional dispositions less closely connected with particular regions of somatic sensations than such concrete emotions as anger, jealousy or love. The disposition of curiosity or inquisitiveness has been fostered in science and history. The complex of emotional dispositions known as the 'moral sentiment' has been trained in systems of morality and self-discipline which have gone far beyond the basic utilities of social necessity. The emotional disposition of

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respect and admiration, with its obverse the lust for power, has harnessed vast reservoirs of surplus energy in the building of great empires and in the humbler associations of man with man. The disposition to reverence and worship has raised such mighty edifices of religion and cult that it has invented for itself a utility goal beyond the term of death. Far greater expenditure of effort, more intense concentration of energy, have gone to the cultivation and perfection of human powers for their own sake than to the procurement of comfort and the service of survival. In the fullest exercise and indefinite expansion of our powers, calling on their every reserve and then demanding of them more, we experience a very special and peculiar pleasure of satisfaction. In this way only our vitality is increased, our very being is enlarged and from men we feel ourselves to be gods. In this satisfaction our 'absolute' values are rooted—the value of Truth in the autonomous exercise of reason that the capacity of reason itself may be stimulated, amplified and extended, the value of Goodness in the invigoration of the moral sentiment and the value of God in the combined exercise of reason and reverence. It is when man is most fully himself that he seems most nearly to touch the divine.

There is no separate emotional disposition in whose satisfaction and increase the absolute value of Beauty is rooted. The aesthetic activity—this will be the thesis of our book—is the autonomous activation of the senses of sight and hearing and of the imagination in the narrower sense of the word which is nowadays technically referred to as 'imaging'. In ordinary life we utilize these faculties to find our way about the world in which we live that we may manipulate the world in the service of our other interests. We do not look and listen in order to acquire more lively capacities to listen and look. But when we are engaged in aesthetic activity sight, hearing and imagination are exercised for themselves alone, our powers are strained to their fullest tension and beyond their full so that the capacities themselves are vitalized and enlarged. And as sight and hearing are the most acute of all our senses, so the satisfaction and pleasure drawn from their amplification and cultivation are correspondingly more profound. They are not a unique kind of pleasure and satisfaction but the same sort as is derived from the tautening

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and expansion of any other faculty, the satisfaction we feel in the creative use of reason when reason is concentrated to a white fire of intensity, the satisfaction we feel to a lesser degree in the perfect co-ordination of bodily function trained to ever higher achievement or the satisfaction we feel in the exercise of an acquired skill for its own sake outside utility's call. The value of Beauty derives not from the incidental fact of pleasure or gratification but from the in-welling of new energy, the irradiance or heightened vitality, from the absolute invigoration and amplification of the capacities which are activated.

I do not of course mean that eyesight and hearing are rendered more acute, as if we increased the strength of our bi-focals or looked out on the world through telescope or microscope. In practical perception we observe the world seriatim, assembling a vast array of simple isolated observations which we then combine and relate by discursive reason. The amplification of capacity does not consist in increasing the number or the rapidity of such discrete sensory contacts but in increasing the plenitude of awareness by expanding the complexity of its unified content while holding it fixed and stable without the intrusion of discursive judgment. Only in this way can the total vitality of our being be enhanced by expanding the capacity of the faculties. And this is the way of aesthetic appreciation of beauty in contrast to practical perception.

Thus we do not rely upon a casual or wayward pleasure or a variable emotion for the criterion of beauty; we do not reduce aesthetics to morality or to the psychology of enjoyment. Nor do we posit any mysterious emotion inspired by beauty alone. We find beauty issuing from the vitalization in autonomous activity of specific functions which are not otherwise employed except as instruments for extraneous purposes. And we shall find the activity of the creative artist to reside in the production of a specific class of objects which alone enable the full activation of sight, hearing and imagination, at heightened vitality and tension, for their own sake and not for ulterior practical ends.

Where so many and such better men have ventured so often in vain I do not boast to have succeeded far. My excuse for venturing again in a field where so many have bogged before is the consciousness of a disposition and some slight knack of philo-

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sophical thought and some fifteen years spent in close contact with creative artists in many spheres. Not that the artist, as T. S. Eliot has said, speaks less nonsense than another when he is pressed to discourse on aesthetics. The knowledge he has is practical knowledge and his purposes communicable only in the medium of his work. But in watching the artist at work in his studio, dissatisfied, frustrated, correcting and emending, until he achieves what seems to him worth achievement, one cannot fail in time to obtain an inkling of the goal he sets before himself and a better understanding of his self-imposed task than from any amount of second-hand verbiage decanted over a pint round the corner. This book has been put together over years which have seen much meditation and many changes of view. It is offered in all modesty and hesitation, not with any illusion that it solves the problem of aesthetics nor even in the belief that my own views will not change in many particulars still. But it is offered with some conviction that in it the way is shown by which the united work of many men over many years could yield genuine progress and build a fruitful science. For of this I am sure, that by the methods which are now employed no progress towards a better understanding can accrue.

The first four chapters are devoted to an exposition of the logical and methodological pre-requirements of an autonomous and fecund science of aesthetics. The fifth and sixth chapters set forth my own view of the nature of a work of art and of aesthetic appreciation. The last chapter examines attempts to measure beauty objectively and shows why such attempts must in the nature of the case be frustrated. If the whole book can inspire some others to undertake the work of scientific aesthetics which the author himself is unable to do, and if it can give some guidance to the many in practical appreciation of the arts, it will amply have served the purpose for which it is designed.

July 1951

Chapter I

DESCRIPTION OF AESTHETICS

IN this essay aesthetics is discussed as a branch of critical philosophy, whose function is to expose and co-ordinate the valid principles which underlie all genuine judgments of the beauty of things called beautiful.

Aesthetics is not intentionally either practical or useful. Its purpose is not to supply the art-critic with ready-made standards of judgment or the artist with rules for constructing works of art. Its origin is in the pure theoretical impulse which causes some men to be dissatisfied with creating and admiring things of beauty unless they can also seem to understand what sort of thing the beauty is which they create or admire and why they think it worth while to do this. Less justifiable, though no less productive of aesthetic writing, has been the pervading curiosity which has induced some philosophers, in whom the theoretical interest was developed disproportionately to their capacity for aesthetic experience, to endeavour to explain theoretically a field of human experience which they were unable to enjoy practically. The creations of the artist, the aesthetic experiences of men engaged in appreciating beautiful things, the aesthetic judgments of the critic, are the material upon which the philosopher of aesthetics works. It is, therefore, improbable at the least, that anyone of low susceptibility to artistic beauty, or of indiscriminating sensibility, would succeed in making valuable contributions to the philosophy of aesthetics.

Like the moral philosopher, the philosopher of aesthetics may not dictate rules and principles for practice. To do so would be to vitiate the *data* of his own science. Admittedly many, perhaps all, writers in aesthetics have laid down standards for taste, have imposed rules and valuations, vented their own preferences. Many moral philosophers have written as preachers and casuists,

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trying to make men good instead of making goodness intelligible. And in both cases they have no less right to do this than the next man, provided only that they do it well. But in both cases they are speaking outside their proper province as philosophers and taking on a new role. In principle the function of aesthetics is to make beauty intelligible and not to make men capable of appreciating or creating beautiful things. Aesthetics is a self-sufficient theoretical science; its aim and value is in understanding the field of its inquiry.

In its own interests it is necessary strictly to confine aesthetics within its proper sphere, for no bastardy is more ugly than the illegitimate union of derivative philosophy and stale art-criticism which popularly walks under the name of aesthetics. Yet when this is said it ought to be recognized that the genuine theoretical science of aesthetics may still have great incidental value in the practical sphere. In any walk of life candid understanding is ultimately preferable to remaining at the mercy of stray winds of unreflective doctrine. Artists and those interested in art are like other men, more or less reflective in disposition. Some find that they work better without recourse to theoretical explanation or justification. On the other side we find artists like Leonardo da Vinci, John Sebastian Bach or Seurat, in whom the speculative impulse was highly developed over a wider or more limited sphere. But even the most 'intuitive' of artists and critics depend largely in their work upon a body of empirical standards which they have embodied into aesthetic attitudes and aspirations of their own. Every judgment of approval or disapproval, in aesthetics as in ethics, implies or is derived from a general principle or standard of valuation. Philosophy makes explicit the standards which are implicit in uncritical practical judgments, clarifies what is confused, relates standards to each other, and enables the critic to choose his standards of valuation with clear-sighted vision. So both the critic and the artist are the gainers. For the artist, it must be remembered, is three-quarters critic both of his own work in the process of its production and of the work of other artists in so far as it provides for him a light to guide his advance or a warning of what to avoid. The artist differs from the critic because, as artist, he is usually concerned at each period in his artistic career to solve some problem or achieve

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some end which is peculiarly his own; and as his work is creative the end or problem often becomes explicit only in the solution of it. But while this narrows the field of criticism for him by concentrating his interest in the one direction of his immediate advance, the principles of criticism are for him the same.

By reacting upon the empirical standards of taste and judgment which no one interested in aesthetic pursuits can escape, a candid interest in theoretical aesthetics will advantage even those who are unable or unwilling to make any direct contact with it. That a place should be found for such unprejudiced and scientifically controlled interest is especially important to-day, when the air is filled with superficially conceived and inadequately co-ordinated 'theories', worrying to the artist and misleading to the art-critic.

The practical value of aesthetics is, however, secondary and incidental. Its ultimate justification is the same as that of all other branches of philosophic inquiry, in the speculative and logical part of our nature which impels us to wish to understand ourselves and our experiences.

There is considerable overlapping among the objective domains of different theoretical investigations. The same objects may, for instance, fall within the domains of the psychologist, the physicist, the biologist or the moralist. The psychologist and the anthropologist may be interested in the superstitious awe which is apt to be aroused in some people by eclipses; but emotional reactions to meteorological phenomena are excluded from the domain of the astronomer. And many concepts and definitions are common to a number of sciences. The different sciences are distinguished both by the range of their objective domains and by the character of the investigations which they undertake within their domains. Thus although the objective domain of any science may partially overlap the domains of several other sciences, it does not in general happen that the domains of any two sciences are co-extensive. In each science there are certain leading concepts which determine the character of the investigation and the sort of properties and relations which are studied in the objects within their domains. These distinctions are prag-

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matic and not ultimate but they are useful for indicating at the outset of a proposed investigation the nature and scope which the inquiry will have.

By aesthetics, then, we are to understand that investigation which is concerned with all putatively beautiful objects and only with these; and that investigation which is concerned only with the beauty of the objects within its domain and with the relations between their beauty and their other properties.

There are no objects necessarily peculiar to aesthetic science but all the objects within its domain may also fall within the domains of other sciences. Pictures may be subjected to chemical or geometrical analysis; they may be used as data for determining the psychology of the painter or the beliefs and habits of the age in which they are painted. Musical sounds may be included in the province of the science of acoustics and psychologists have studied the emotional responses of various subjects to musical and colour stimuli. Ceramics and sculptures recovered from the distant past are valued as data from which the archaeologist may derive theories about the manners and civilizations which prevailed before the dawn of documented history.

The study whose scope most nearly resembles that of aesthetics is the history of art, under which we are to include the history of literature. The objective domain of aesthetics may be wider than that of history of art in that it may include putatively beautiful objects which are not artifacts. Any system of aesthetics will, for example, have to include an explanation of the difference between so-called 'natural' and 'artistic' beauty and their relations to each other. But the more important difference lies in the nature of the inquiries within their respective domains. The historian is concerned to establish the temporal relations among works of art and to assign them to the artist who in fact created them; to trace similarities and contrasts among the works of different artists and periods; to detect influences of earlier upon later art; to investigate the connections between works of art and the mentality and beliefs of the artist and the social, economic and intellectual characteristics of the age in which he worked. The purpose of aesthetic investigation is to render inexcusable misunderstandings about the meaning of propositions in which beauty is attributed, to discover the necessary common proper-

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ties of all beautiful things and to discriminate these from other properties which seem to be important in some but not in all things that are beautiful, to examine the characteristic human activities of making and appreciating beautiful things, and to expose and co-ordinate the principles which determine the validity or truth of all particular judgments of approval or disapproval in respect to the beauty of the things judged. History is the discovery, recording and classification of facts; aesthetics is a branch of philosophy.

Mr. Wilenski has attempted some sort of classification of all those studies which are concerned with or which impinge upon matters of fine art.¹ Aesthetics differs from them all, because the result which it would achieve if successful would be to provide principles for discriminating genuine from false, and true from untrue, aesthetic judgments. Art criticism or appreciation is related to aesthetics as casuistry is related to ethics. It is the practical application of the principles which are to be elucidated by aesthetics. Because there is not yet a successful science of aesthetics, criticism remains merely the expression of the personal taste of the critic as this is more or less influenced by the taste of the age in which he lives.

The description of aesthetics as the theoretical investigation of the beautiful does little, however, to help elucidate the nature and scope of this science, unless we were to assume—what would be palpably untrue—that the meaning of beauty is known. In vulgar parlance the word 'beauty' is one of those magnificently equivocal terms whose multiloquent ambiguities make it peculiarly suited to the superficialities of polite discourse and the inanities of popular art appreciation. Anything can be described as 'beautiful'—a stroke of golf, a medical operation, or a baby's smile. The word is simply an expression of general approbation, meaning no more than that a thing said to be beautiful is good of its kind. This popular use of the word 'beauty' is perhaps closely akin to what Lalo described in the following way: 'an implicit, confused and instinctive judgment of the more or less normal, healthy and typical or more or less powerful and highly developed character of a being or object of a given kind'.² This is

¹ *The Study of Art.*

² Quoted by C. K. Ogden in *The Foundations of Aesthetics*, p. 26.

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probably the most important element in unreflective judgments about the beauty of natural objects. And unreflective judgments of representational art often mean no more than that a work of art contains or does not contain a representation of an object such as the above or that it causes the observer to remember a previous experience of such an object. But this is clearly not what is meant by 'beauty' as the specific object of aesthetic inquiry. When we envisage the possibility of a serious science of aesthetics, the object of which is the notion beauty, we certainly understand the term 'beauty' in a more particular and therefore more limited sense than its popular connotation in everyday parlance.

The fact that it is possible to write the last sentence with reasonable assumption of its acceptance by the reader is an indication that we have in common some idea of the proper scope of aesthetic inquiry and of a more specialized meaning of the word 'beauty' proper to aesthetic inquiry. In order to pin down that common idea it is proposed to define 'beauty' in the aesthetic sense as 'the proper excellence of a work of art'. This is a purely logical definition. It adds nothing concrete to our notion of 'beauty', since both the terms 'art' and 'proper excellence' require elucidation. But it serves, if accepted, to delimit the scope of aesthetic inquiry. Like all definitions, it is arbitrary; its justification must be pragmatic. But unless this, or some such definition, is accepted and is found to work, aesthetics will never become more than an empirical study of the linguistic habits of mankind.

A logical definition of any term is a formula which may be substituted for that term in any proposition in which it occurs without altering the logical character of the proposition. This is technically expressed as follows: Any proposition in which the formula of definition has been substituted for the original term entails and is entailed by the same propositions as the proposition containing the original term. When 'beauty' is used in aesthetics as the key-concept of that field of investigation it shall, then, be logically defined as 'the property in virtue of which works of art are judged to be good works of art'.

The peculiarity of a logical definition is that it specifies the nature and scope of an investigation but does not presume such

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concrete knowledge about the object of inquiry as could only result from a completed investigation. It is formal and belongs to a different category from the class of definitions which substitute another concrete notion—such as social utility or emotional efficacy—for the notion of beauty. Yet it seems likely that the logical definition which has been proposed is unintentionally intended by most writers who advance more concrete definitions of beauty. If, for instance, they define beauty as the power to evoke emotions or as social utility, they mean that the property in virtue of which works of art are judged to be good works of art is their efficacy in evoking emotions or their social utility. They do not intend to say that beauty *means* social utility; if they intended this, they would not limit aesthetic discussion to putatively beautiful things but would include in it all things which have putative social utility. Implicitly, they accept our logical definition of beauty; it is accepted in fact by all aestheticians.

The definition makes possible and demands a further distinction between two uses of the word 'beautiful' current within the vocabulary of aesthetic appreciation and criticism. The word 'beauty' is commonly used as one of a set of cognate descriptive aesthetic terms along with 'prettiness', 'loveliness', 'sublimity', 'grace', 'delicacy', etc. Although the descriptive connotations of these words are not sharply differentiated, there is no doubt that they are intended descriptively and do point to qualities sufficiently distinct for it to be arguable whether this or that term of the group is the more appropriate to this or that object of appreciation. It often happens that when any of these descriptive critical terms is applied to a work of art the speaker also intends a statement about its beauty in the specialized sense of aesthetics, that is about its excellence as a work of art. But this added intention should be distinguished from the true descriptive sense of such statements. The word 'pretty' has to-day a fairly exact descriptive connotation as such words go; but when it is applied to works of art one person will intend approbation and another condemnation.

Beauty in its descriptive sense is not necessary to the excellence of a work of art and is not the aim of artists in all periods and styles. The changes of taste and style from one age to another may be described with some accuracy by indicating the type of

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objective qualities which they favour in works of art. And it should be noticed that these descriptive terms, of which 'beauty' is one, are applied without change of meaning to both works of art and natural objects. In most European languages to-day the word 'beauty' describes the sort of objective characteristics which were favoured in later Greek art and in certain schools of Renaissance art; its main characteristics are regularity, balance and placidity. Endless confusion and muddle is being caused by failure to realize that the word 'beauty' is used with two quite separate meanings which neither imply nor exclude each other. As the key-term in aesthetics it means the characteristic excellence of works of art, *no matter what specific qualities may be conceived by this or that theorist to constitute that excellence*. It is here a normative term. As a special *descriptive* term used in appreciation, and not infrequently too in everyday language about so-called 'natural' beauty, it indicates a more or less specific formal quality which some works of art possess or aspire to possess and others not. The distinction between the two meanings is very aptly illustrated in the following quotation. 'For me a work must first have vitality of its own. I do not mean a reflection of the vitality of life, of movement, physical action, frisking, dancing figures and so on, but that a work can have in it a pent-up energy, an intense life of its own, independent of the object it may represent. When a work has this powerful vitality we do not connect the word Beauty with it. Beauty, in the later Greek or Renaissance sense, is not the aim in my sculpture.'¹ Moore is here using the word 'beauty' in its *descriptive* sense. He endeavours to describe by contrast a quality which his own work, in common with much of the greatest Romantic sculpture, endeavours to achieve. He does not mean that his works do not aspire to be excellent as works of art.

¹ Henry Moore in *Unit One*.

Chapter II

DESCRIPTION OF METHOD

IN the 'Description of Aesthetics' beauty was defined as the characteristic excellence of a work of art. The employment of the word 'beauty' in everyday language, in which it is a term of emotive approval applicable to almost anything that is judged to be good or outstanding of its kind, was distinguished from the specialized meaning of the same word in aesthetics. And within the sphere of aesthetics and art appreciation, as also in everyday language, it was found to have also another meaning when used as one of a set of cognate descriptive terms, in which meaning it does not necessarily, although it may, carry the implication of artistic excellence. So far, then, the vague and uncertain notion of the scope and nature of aesthetics which is our sole preliminary guide has been rendered somewhat more precise by a definition. The object of aesthetic inquiry is the characteristic excellence of works of art.

The further conduct of the inquiry must be by the conjunction of the only two methods by which theoretical knowledge can be extended, the logical analysis of ideas and empirical generalization from observed facts.

(1) A large part of the work of critical philosophy resides in the analysis and clarification of ideas and in the concatenation of logically coherent systems of ideas. The special pitfall of this method and of all speculative or deductive thought is its tendency to escape relevance to the world of experience. Professing to elucidate and understand the world of experience, the incautious philosopher finds himself moving in a private Valhalla of his own. It is not only the German metaphysical idealists who have succumbed to this danger.¹ Many of the psychological school

¹ 'Every aesthetic production starts from an essentially infinite separation of the two activities which are separated in all free productions. But as these two

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have discovered strange emotions and curious mental states and equiposes of which introspective experience knows nothing. And as we shall see, a still larger number of writers ushers us un-awares out of the field of aesthetics into the domain of moral science, sociology or economics. Speculation in aesthetics must be constantly controlled by experience. Concrete judgments about the beauty of particular things are the material available as primary *data* to the science of aesthetics; they are its initial and remain its ultimate contact with experienced actuality and are the only determination of what things are and what things are not within the domain of aesthetics. Because beauty judgments are expressed in language, and because the language in which they are expressed is extremely ambiguous, it is a necessary part of the preliminary work of aesthetics to elucidate its *data* by examining the intended meanings of beauty judgments. An enormous field of inquiry is provided by the recorded appreciations of works of art that already exists and until these appreciations have been subjected to linguistic investigation, and the meanings intended in the beauty-judgments which they contain have been systematically elucidated, it is unlikely that a sound science of aesthetics can be constructed. But in the course of the logico-linguistic study of recorded beauty judgments it soon becomes apparent that the notion of beauty has not the precision and uniformity of such notions as simultaneity, space, equivalence, etc., whose analysis, although difficult and obscure, may lead to genuine extension of our understanding of experience. In the literature of aesthetics we find not so much an attempt to analyse a single notion as a collection of proposals to substitute for the idea of beauty a large diversity of other notions which, while purporting to result from a logical analysis of the notion of beauty or to express the logically intended meanings of beauty judgments, are already familiar from other spheres.

activities are to be represented in the product as *in union*, this product represents an infinite in finite form. Now the infinite represented in finite form is Beauty—without Beauty there is no work of art.' (Schelling.) When we are told in theology that man is in the image of God, it is presumed that we know man and through our knowledge of man's nature we can reach some understanding of the divine. But when in an investigation into beauty we are told that beauty is the finite image of the infinite, that which we do not know is explained in terms of that which we cannot know.

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Thus most definitions of beauty in the books written on aesthetics are in fact verbal definitions. They do no more than notify the reader of the verbal conventions which the writer proposes to adopt and say in effect: 'whenever the word "beauty" is used, it is to be understood that such and such a property is intended,' mentioning some known and determinate property such as social usefulness, the property of being an expression, the property of creating an illusion, the property of being contemplated with pleasure, and so forth. For it would be nightmare madness to suppose that all the many characteristics which are substituted for the idea of beauty in the multiplicity of definitions of this kind are so many various attempts, correct or incorrect, to analyse one and the same notion into simpler, more familiar or logically more fundamental notions. And if they are not logical definitions, they must be verbal definitions, either purporting to be a linguistic analysis of the meanings actually latent in the ordinary language of art criticism or simply indicating a linguistic usage which the writer makes his own. About verbal definitions it must be remembered that they are not right or wrong, but usual or unusual, convenient or inconvenient. The meanings of words are conventional and all scientific and philosophical language is to some extent arbitrary. Verbal definitions may be criticized for being bizarre, confusing or distressing. But these are linguistic not logical faults. Verbal definitions cannot be either true or untrue because they are simply descriptions of the linguistic conventions employed by the writer. A great deal of unnecessary wrangling could be avoided if this were generally understood.

It is more important, and apparently has been more difficult, to remember that definitions of beauty are also descriptions of the nature and scope of aesthetic investigation. If beauty has been defined as 'social utility', subsequent investigation cannot consistently be limited to works of art or to objects commonly called beautiful, but should cover false teeth, factories, fish, fenders and all other objects of recognized social utility. If the writer includes works of art in his inquiry, he is entitled to investigate their social utility alone or the connections between their other properties and their social utility. If his investigation is complete and successful, it will indicate some principle by

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which the comparative social utility of Tanagra figurines and lavatory plumbing can be assessed. An aesthetician who defines beauty as 'the property of being an expression' must recognize the intensity of beauty in the screams of horses entrapped in a burning stable and the antics of a schoolmaster who has sat upon a nicely adjusted pin. And the most extensive field of all should be covered by the theories which define beauty in relation to pleasure or hold that pleasurable is the criterion of beauty, for logically nothing could be excluded from the scope of the beautiful when so defined.

Works of art serve many functions in human society. They may be devotional objects, instruments of social, religious or political propaganda, incentives to morality, pleasant relaxation from the more strenuous occupations of life, a means to the ventilation of intellectual or pecuniary snobbery, or objects of barter. These and many other functions are served by works of art in contemporary life. But none of these functions is peculiar to works of art and none of them seems to be necessary or common to all works of art. If, then, anyone who says that a certain work of art is beautiful means that it encourages him to respect the moralities, arouses his indignation against social abuses, recalls pleasant associations from his past life, or impresses him as likely to be a good investment; if he means any of these, or any similar thing, we can discount his opinion as irrelevant for the purposes of aesthetics, because aesthetics investigates the excellence which is peculiar to works of art as works of art and not their excellence in performing functions which are also performed by sermons, newspapers and operations on the stock exchange.

It is admittedly possible, and has been asserted, that there is no excellence peculiar to works of art, and that whenever we value a work of art we estimate its usefulness in one or another of these functions. If this is true, it follows that aesthetics is not an independent science with a field of investigation peculiar to itself, but a branch of psychology, sociology, moral science, history or commerce. If this were the conclusion of our study, it would at least have the negative value of reducing wastage of energy on a phantom science. But against the premature rejection of aesthetics, whether by those who avoid it or by those aestheticians who serve up something else in its name, should weigh

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the fact that works of art are commonly assessed and compared in respect of an excellence other than the many incidental functions which they fulfil. Of two works of art which both are intended to serve the purposes of propaganda the one which is less effective as propaganda may be judged the better work of art. *Les Chants de Maldoror* may be judged to be superior as a work of art though less effective an inducement to a moral life than the poems of Mrs. Hemans. The aesthetic value of Van Gogh's pictures is not generally supposed to have changed with their market value. A waltz from *The Merry Widow* may be found more pleasant, for example as a background to table conversation, than Brahms's 'Requiem' or 'Der Meistersinger', without being judged to have greater artistic excellence. In the consideration of music we find a particularly strong argument for the likelihood of an excellence peculiar to works of art, since those musical compositions which are pretty generally admitted to have a high degree of artistic excellence do not appear to fulfil any ulterior function. If there were no excellence peculiar to works of art, the definition of beauty which we have proposed as regulative for aesthetics would be a meaningless form or words; but the possibility that it is not meaningless seems sufficiently strong to warrant our proceeding with the investigation which alone can prove whether it has meaning or not. In order, then, to conduct this proposed investigation we preliminarily reject as irrelevant all definitions of works of art which are based upon their effectiveness for some ulterior purpose which can also be served by things which are not works of art.

When beauty is defined as 'social utility' (as, for example, by members of the Ruskin school and in a somewhat different sense by sociological writers whether of the school of Herbert Spencer or of the school of Karl Marx), what is meant is that the characteristic excellence of a work of art is measurable in terms of its social utility and that every work of art is beautiful in the degree in which it is socially useful. It is not, I think, ever seriously meant that all socially useful things are beautiful in the degree in which they are socially useful. Sewers and sewing-machines may be called beautiful by experts in their construction using the word 'beauty' in its popular meaning 'good examples of their kind'; but writers of the sociological schools of aesthetics are not

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generally prepared to compare the 'beauty' of sewers and rose-gardens by their comparative social utility. And ordinarily when one factory is said to be beautiful and another ugly no comparison of the social utility of the two factories is implied. Sociological definitions of beauty really intend to say that beautiful things are a sub-group within the class of socially useful things and that therefore the study of beauty, which goes by the name of aesthetics, is a branch of sociology. They do not in general indicate the *differentia* of the sub-group of beautiful things within the class of socially useful things, whether it be a special type of social utility or some differentiating characteristic irrelevant to social utility; but they are not prepared to judge all socially useful things as beautiful in the degree in which they are socially useful. Even within the sub-group of beautiful things they are usually not prepared to assess the relative beauty of members of the group by the degree of their social utility alone.

The same considerations apply, *mutatis mutandis*, to all proposed definitions of beauty in terms of 'utility' values or psychological states. In particular, the many writers who define beauty in terms of pleasure are not prepared to recognize that all pleasant things are beautiful in the degree in which they are pleasant and that the scope of aesthetic inquiry is co-extensive with the range of pleasurable things. There is no writer on aesthetics who would be practically prepared to include within the field of the beautiful all the undoubted pleasures listed in More's *Utopia*. What the people who use this sort of definition usually mean is, I think, that given a fairly well-defined class of things (e.g. putative works of art) about which we are likely to be interested to ask whether any one of them is beautiful or not and in what degree it is beautiful, its pleasantness (power to stimulate emotion, etc.) is an *indication* of the degree of its beauty. But in practice few of the writers who define beauty in simple psychological terms are consistent in applying their definition as an indication of degrees of beauty even within the limited group of putatively beautiful things.

If beauty is ultimately definable only in terms of psychological or social utility, there will be no autonomous science of aesthetics but only a conglomeration compounded of moral science, applied psychology and economics within an artificially limited

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sphere. But in a genuine science of aesthetics the definition of beauty reached by logical analysis or otherwise must itself serve to define and delimit the class of things which are accepted as the proper field of aesthetic inquiry and to discriminate degrees of beauty among particular objects within that field. It must indicate a property common to all members of the field and peculiar to them, not a property possessed by many other sorts of things as well; and it must indicate a property possessed in varying degrees by the members of the field. If there is no such property there is no science of aesthetics. The fact that there are so many different theories of aesthetics, and that all of them are inconsistent in practice with the logical implications of their definitions of beauty, makes it reasonable to suppose that their definitions are wrong or that a consistent and coherent science of aesthetics is not possible. The fact that the definitions of beauty that have been advanced are so various as well as so unproductive makes it reasonable to suppose that by logical analysis alone we shall be unlikely to reach a sound definition of beauty.

Most treatises on aesthetics contain a verbal definition of beauty; a more or less ingenious attempt, by concealing its verbal character, to hoodwink the reader into believing that it is correct and other definitions incorrect; much practical criticism; and some miscellaneous discussion of other characteristics of certain limited kinds of works of art. There exists, I believe, no work on aesthetics which has regulated the nature and scope of its investigation strictly in conformity with its definition of beauty or controlled its practical criticism by the results of its theoretical investigation. And among the most insidious offenders are the so-called 'psychological' aestheticians who define beauty as the property of arousing pleasure (or evoking emotion) on being contemplated, and who then restrict their investigation to a limited class of the objects which arouse pleasure or evoke emotion in a limited class of observers. As verbal definitions are arbitrary, serving to indicate the nature and scope of a proposed investigation, and as they are not in any case true or false but linguistically convenient or inconvenient, it is sufficient condemnation of any verbal definition of beauty if the investigation does not remain consistent to its own definition.

It will be found that only two types of definition escape logi-

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cal inadequacy and fulfil the conditions necessary to the emergence of a coherent science of aesthetics. They are (a) those which define beauty in terms of a mental state or activity which only occurs in relation to the class of things which we are prepared to recognize as beautiful; and (b) those which define beauty in terms of some non-psychological objective property which is possessed by all things which we are prepared to recognize as beautiful and only by these. Whether or not there exists in fact a special kind of mental state or activity which only comes into being in the appreciation of beauty, and whether there exists in fact a special kind of objective property common and peculiar to beautiful things, cannot be proved by logical analysis or theoretical deduction. It is a matter for empirical investigation. Empirical examination is necessary to show the relevance to experience and actuality of any theoretical or logical deduction. To anticipate the later course of our study, we shall endeavour to show that there exist in fact and experience both a special type of psychological attitude and a special sort of objective property which are peculiar to the realm of aesthetics and that in the connection between the two is to be found the final understanding of the nature of beauty.

(2) The empirical method consists in the collection and examination of a large and varied assemblage of instances within a given field, in order to isolate those characteristics which are common and peculiar to all objects within the field. In order for this method to issue in useful results it is necessary that the instances examined be sufficiently numerous and sufficiently various to render it reasonably likely that the characteristics common and peculiar to them all shall be only those characteristics which are common and peculiar to all members of the class of things which is being investigated. It is also necessary that all the objects examined shall be instances of the class of things which is to be investigated. But for the latter condition to be fulfilled, in order that we may select the relevant and reject the irrelevant for examination, we must already know the distinguishing characteristic which it is our purpose to discover. We must already know, in the sense that we are able to recognize it intuitively, the quality which we hope by our empirical examination to understand more fully.

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There are two schools of empirical investigation in aesthetics, which have been conducted often in opposition to each other but which are both ultimately essential to a complete understanding of the subject. They are the empirical study of the objective properties of beautiful things with the view to finding a property common and peculiar to them all and the study of appreciation of beauty by empirical psychology.

(2. 1) The method of investigation used in the former school is to analyse the structure of a large number of works of art which are traditionally recognized to have a high level of beauty, in the hope of discovering some structural property common and peculiar to them all. (In fact investigators start with an idea of the nature of the structural property which they believe to be common and peculiar to all beautiful things and do not discover this property by purely empirical methods. But in so far as they attempt to verify their hypotheses by empirical investigation, their method is empirical.) As beautiful things are admitted to be very various, and the property we call 'beauty' is common to them all, it must be a formal or structural property. Only a structural property could be common to things so diverse as a drawing, a statue, a poem, a dance, a sonata, a cathedral, etc. It must also be a structural property not possessed by things we do not call beautiful.

In practice, this type of investigation is logically impeded by the immense diversity among judgments about the beautiful and by the difficulty of deciding, without some non-empirical criterion, whether any particular thing is or is not to be classed as beautiful. If we are guided by the judgments of artists, critics and amateurs of the arts—those who have most seriously concerned themselves with the beautiful—we shall find some measure of agreement about what is and what is not beautiful, although there will appear even so disturbing discrepancies, especially about the grading of beautiful things in a scale of relative value, and apparently capricious variations of taste from age to age. But if we are to include the judgments of the aesthetically untrained the result will be chaos. There may perhaps be no single thing in the world about whose beauty all observers would be in agreement. And what one man finds beautiful another finds boring. Reproductions of pictures of bird flights by Scott are about as

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popular as reproductions of Van Gogh. There are many more people who genuinely and instinctively like a semi-nude by Russell Flint or a War Memorial by Jagger than there are people who genuinely like a sculpture by Gaudier-Brzeska or a painting by Mantegna. Similarly those who have learnt from Mr. I. A. Richards how to discriminate a poem by Donne from a poem by Ella Wheeler Wilcox and to evaluate the former above the latter, are far fewer than those who instinctively and uncritically prefer Miss Wilcox. There is, in fact, no single class of putatively beautiful things, but a different class for every subject.

In practice we find that workers in the empirical school select a few limited groups of objects generally admitted by respectable artistic opinion to be beautiful and confine their investigation to them (e.g. Greek vases in the case of Jay Hambidge). But it is as important methodologically from the empirical point of view that the majority of people find Greek vases somewhat uninteresting as it is that the minority ascribe to them great beauty. For a purely empirical study bad taste is as important as good taste, or we should say that an empirical criterion for distinguishing good and bad taste cannot be assumed at the beginning of the inquiry. It is therefore logically necessary to have recourse to (a) linguistic and logical analysis of actual beauty judgments, and (b) psychological study of the contemplation or appreciation of beauty. By these methods some order could be introduced into the inchoate field of investigation initially confronting objective empirical investigation, a field in which initially everything which is judged to be beautiful by one person is denied beauty by someone else and conflicting standards of taste run riot. The logical analysis of existing beauty judgments will show that much of the apparent initial discrepancies and conflicts between these judgments is only apparent. If apparently conflicting beauty judgments are judgments about different properties, they are irrelevant to each other and do not conflict. If three judgments about the beauty of a work of art mean respectively that it is or is not conducive to morality, that it is or is not an accurate representation of some natural object, and that it does or does not arouse agreeable emotions in an observer, there is no conflict between them. But we have seen that an analysis of the various meanings actually implied in the beauty judgments

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which are made by the art critic or by the layman is not adequate to show which of these meanings, if any, is germane to aesthetics. A psychological study of the appreciation of beauty might show furthermore that the capacity to appreciate varies from person to person, is capable of training and development, that as some people are colour-blind or tone-deaf so some people are without the capacity to distinguish beauty or that this capacity is limited in different persons to one or other of the arts only. A person capable of appreciating literary beauty might be incapable of appreciating the beauty of painting or music. If this were shown, much of the conflict between beauty judgments would be traceable to judgments made outside the capacity of a person to appreciate or to intrinsic differences in acuteness of aesthetic faculty. And the great differences between specialized and unspecialized judgments of beauty would be largely traceable to difference in the development of the capacity to appreciate among different observers.

By these methods it might be possible to introduce greater conformity among the judgments of trained appreciators of art and to show reason for the divergences of the mass of unqualified and untrained reaction to works of art from the judgments of skilled observers. While complete uniformity could not be achieved, it is not unreasonable to hope that the measure of conformity would be sufficient for the objective empirical study of beauty to be legitimately pursued in the tentative fashion which is all that any empirical investigation can aspire to.

Logically, existing empirical studies of an objective principle of beauty are not purely empirical because their initial selection of instances for investigation presupposes a non-empirical principle of selection among beauty judgments and specifically a non-empirical preference for the judgments of skilled and trained observers. A genuinely empirical investigation would be compelled to give equal initial weight to the aesthetic preferences of Mr. Roger Fry and the local churchwarden, Herbert Read and the local stonemason, Mr. T. S. Eliot and the cinema enthusiast, unless and until some empirical reason were found for discriminating among them. But these studies may still contribute valuable material to aesthetics if the non-empirical assumptions with which they work can be harmoniously combined with the logi-

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cal analysis of beauty judgments and the psychological investigation of appreciation.

A second fundamental weakness of this school, if it claims to be regarded as a complete method of aesthetics, is to be found in the fact, which is as certain as any fact in aesthetics, that when anything is said to be beautiful we do not *only* mean that it has certain structural properties; we also mean, at the least, that in virtue of those structural properties it is *superior* to, or has greater value than, other things similar to it in every respect other than in the possession of these properties. A beauty judgment is not a judgment simply ascribing value but it does normally carry with it a judgment that the beautiful thing has value in respect of its beauty. The advocates of this school of aesthetics themselves tacitly admit this by loudly proclaiming the superiority of those works of art in which they find the structural properties which they maintain to constitute beauty. Let us suppose, then, that the common structural property of beautiful things is known by empirical examination. We must still ask: 'Why are these things called "beautiful" and preferred to similar things of different structure?' The only answer can be: 'Because these things are called beautiful and are preferred by sensitive critics, or by respectable artistic tradition.' If we ask: 'Why is this tradition and not another called respectable and why are the judgments of these critics valid?' again the only answer is: 'Because they detect and appreciate the structural property which is identified beauty.' So the argument becomes circular. The mere presence of an objective structural property common to all beautiful things could offer no ground for the value which is normally attached to beauty and the appreciation of beauty.

Although the search for an objective formal property of beauty is frequently decried, those who have been practically concerned with criticism and appreciation of works of art have always assumed that one work excels another in virtue of some objective difference in their intrinsic structural properties. It is almost inevitable that this practical assumption should be made by art criticism even when it conflicts with an aesthetic theory overtly professed by the critic; for the critic is never concerned merely to record psychological responses to works of art but has always regarded it as part of his function to persuade others that

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his own aesthetic judgments should be respected. And the most likely ground upon which he can claim that his judgments are more worthy of respect than those of another is the assumption that they correspond to some objective difference of excellence in the objects whose beauty he is assessing. The only other ground would be that the critic's emotional responses are more valuable than those of his readers and should be imitated. Though this is often tacitly assumed by critics, the more modest among them justify the assumption by claiming that their reactions are indicative of 'true' objective beauty. Yet remarkably little progress has been achieved in the empirical research for an objective structural property common to all beautiful things. Such studies have too often mistaken casual and fluctuating 'conventions' for universal principles of beauty. To minimize this danger the investigation should be applied to more than one art-form and the instances chosen in each should range over a wide variety of styles and epochs. Each one of the arts employs characteristic 'conventions' or limitations in the manipulation of its material, and these conventions give rise to the objective structural differences in works of art by which different styles and periods are distinguished. It is probably impossible to draw a hard-and-fast line of demarcation between the more obvious conventions of a period, which can be expressed in 'rules of composition' or are handed down by 'studio tradition', and the more subtle conventions of manipulation which cannot be adequately described in words and which constitute the style of individual artists. It is impossible to conceive an art-form without conventions. But the conventions in any art-form change from age to age; those works of art which are traditionally recognized to be of outstanding excellence in their kind often break through and disregard the conventions of the style to which they belong; and a work may conform strictly to all known conventions in a style without achieving artistic beauty. Indeed, too great conformity to, and facility in, the conventions of any style is the distinguishing mark of that artistic deterioration which is nowadays known as Academicism. It is therefore necessary to look for some more fundamental structural property which will underlie the various conventions and remain constant amid the variations of style and technique. The danger of empirical research into structure is the

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tendency of dogmatists to mistake conventions which are particular and changeable for constant and universal laws of beauty and to rear the ugly mausoleum of Academicism upon the grave of creative genius.

The empirical investigation of an objective beauty-property, if pursued in isolation and regarded as the sole and adequate method of aesthetics, involves two logical fallacies. (1) It must assume a non-empirical principle in order to delimit its field of investigation. (2) If successful in its conclusions, it is still unable to explain why value is assigned to those things which possess a specific objective property of formal structure outside and apart from their relation to human response. It also faces a serious practical danger of mistaking artistic conventions for universal principles of beauty.

(2. 2) The other empirical school in aesthetics is the psychological study of appreciation and should consist in the investigation of a large and representative selection of instances of appreciation with a view to isolating the psychological features which are common to all appreciation and peculiar to it.

But empirical psychological aesthetics is confronted with an initial logical difficulty analogous to that which confronts empirical objective aesthetics. The latter is unable to decide, among conflicting beauty judgments, what particular things are 'really' beautiful, and empirical psychology is unable to decide empirically what are instances of 'real' appreciation. One man gazes with wonder and delight upon the pottery figures offered as prizes of marksmanship at the village fair and is bored in the National Gallery. Another is thrilled by a Titian and revolted by the pottery prizes. Are the delight of one man in the pottery figure and of the other man in the Titian both instances of appreciation of the beautiful? Or is one genuine appreciation and the other spurious? And if so, why?

Most psychological studies of aesthetics are involved in a double logical inconsistency. In the first place they assume non-empirically that beauty is the property of arousing pleasure or emotion. They could not reach such a conclusion empirically because they never assume that every instance of pleasure or emotion is an instance of appreciation. If it is assumed that beauty is the property of arousing pleasure, evoking emotion, etc., the

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divergences of beauty judgment are no longer a difficulty, because the class of beautiful things is automatically different for each subject. This position involves rejection of the possibility of autonomous aesthetic science and the most that such an empirical psychological study could achieve would be the negative result that there are no unique psychological features common to all instances of appreciation and peculiar to them. If the issue of the whole matter were that the fluctuations of individual and wayward taste are ultimate, *de gustibus non disputandum est*, there could be no fruitful study of aesthetics.

Most psychological studies contain a second illogicality in that they limit their investigation to the appreciations of a small class of people, those who constitute 'respectable artistic opinion'. They define beauty as the property of stimulating emotion, and then quite illogically add 'but only by the class of putatively beautiful things and only in the suitably conditioned people who constitute respectable artistic opinion'. For empirical investigation it is *a priori* as important that most people do not derive pleasure from contemplating a Giotto or a Braque as it is to analyse and describe the particular sort of pleasurable emotion which the investigator conceives that he and people of his kidney do derive from this contemplation. It is as important *a priori* that many people admire and enjoy the cement garden gnomes sold by the local ironmonger as it is that those who claim refined aesthetic taste shudder with distaste at these aesthetic atrocities. For a genuinely empirical study so-called bad taste is as significant as what is respectably known as good taste.

It is only by limiting themselves to the considerations of the emotions supposed to be experienced by persons of natural refinement and trained sensitivity in appreciation that the psychologists succeed in making their theories at all convincing. The inclusion of the unrefined and untrained would issue in quite chaotic conclusions and if works of art were to be defined by statistical averages from such an investigation—the only method open to a purely empirical investigation—almost all that is traditionally recognized as art would be reduced to minor importance as representing the emotional habits of a few exceptionally constituted beings. It may be believed that the opinions of 'experts' in aesthetics have greater value in investigation and

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should be given greater weight; but such weighting necessitates the employment of some non-psychological principle of discrimination. Psychology is an empirical science and a principle of discrimination among empirical *data* cannot itself be empirical.

There are two principles of discrimination which would warrant the preference which is in fact given in psychological treatments to the appreciations of experts. The most usual principle of discrimination, implied if rarely stated, is the quasi-moral assumption that the emotions experienced towards works of art by sensitive and trained observers, by artists and by enlightened lovers of art, are more valuable in themselves than the emotions of the insensitive, untrained or unappreciative. Now I am myself quite convinced that the organization of emotion and sentiment towards works of plastic art which we associate with men like Roger Fry, Ernest Fenollosa, Meier-Gräfe, is at a higher level of human and social value than the emotional disposition of the ecclesiastics who bestow, and their parishioners who hang, the customary church calendars. I have no doubt that the emotional dispositions to music of men like Tovey and Ernest Newman have greater human and social value than the emotional dispositions of those who favour and enjoy the tunes in *Hymns Ancient and Modern* or the emotive wailings of a jazz band; to me the emotional dispositions to works of literary art which are cultivated by critics like T. S. Eliot, I. A. Richards and F. R. Leavis seem beyond reasonable question of higher value than the emotional dispositions of those people who once praised and enjoyed the works of Ruby M. Ayres or Rider Haggard. I have, therefore, a tendency to sympathize with the sort of value discriminations which are usually adopted by psychological writers on aesthetics. But it is one thing to believe that the pursuit and production of beauty is valuable and quite another thing to maintain that the beauty of beautiful things is consequent upon the value of the emotions which they arouse. This leads to the second possible principle of discrimination, namely that some appreciations, and in general those experienced by men of trained and refined sensibility, are veridical and others not. That would lead back to the 'objective', non-psychological conception that beauty is some objective, structural property of the object appreciated; that some men are more sensitive than others to this property;

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and that their aesthetic emotions are consequent upon correct perception of this property where it exists. It might then be argued that the emotional appreciations of persons of cultivated taste are superior in value to the emotions experienced by persons of uncultivated taste not as emotions in themselves but in virtue of the quality of the objects towards which they are directed. The appreciations of the trained and sensitive observer are valuable only because the objects which he appreciates are beautiful. Such a position renders the complete empirical study of aesthetics circular. For we saw that the empirical investigation of an objective and formal property of beauty required an initial reference to psychology in order to determine whether any specific object of investigation belongs or not to the class of beautiful things. If now psychology says that the only way in which it can discriminate a genuine from a spurious instance of appreciation is by reference to objective beauty, we reach a dead-lock.

It seems to me that there is only one escape from this logical and methodological dilemma. If in the empirical examination of alleged instances of appreciation it were found that in some of these there occurred a special psychological state or activity which did not occur in others or in any form of mental activity other than appreciation, and if the occurrence of this special psychological state or activity were found empirically to be *more or less* confined to what has been traditionally regarded by most expert and sensitive opinion as the appreciation of beauty in art, then we should have a pointer which would seem to be of value for further research. If subsequently it could be shown that there is some objective property common and peculiar *more or less* to those things which are the objects of this special mental state or activity, we should have more than a pointer; we should have indeed a solid basis for aesthetic study and a principle which could be used as a commonsense norm for discrimination among even putatively expert and respectable aesthetic judgments, provided always that it could continue to be justified by continued empirical verification both in the psychological and in the objective field. I can think of no other basis upon which a coherent science of aesthetics, relevant to experience, could be built.

Chapter III

METAPHYSICAL AESTHETIC THEORIES

IN everyday language of appreciation or criticism the notion of beauty is admittedly confused and people mean different things in varying degrees when they use the word 'beautiful'; yet there would appear to be sufficient core of agreement in popular notions of beauty to enable fairly large groups of people when they speak together about the beautiful to reach a measure of understanding adequate for practical purposes. It is often possible to indulge in controversy or to register agreement about what things are and what things are not beautiful without its being immediately obvious to the disputants that they are talking at cross purposes or that their agreement is merely verbal. It is to be presupposed, at any rate at first sight, that although different people embrace different and sometimes conflicting ideas under their notion of beauty, there is, nevertheless, some common core of meaning in the popular, unphilosophic use of the word.

Among those who are interested in the fine arts without being professional aestheticians—artists, critics, curators of museums and galleries, dealers, collectors, historians—the term 'beauty' connotes a complex notion, in which the following simpler constituent notions seem to be the most important. (1) That which is said to be beautiful is said to interest, excite, or arouse pleasurable emotions in the speaker. (2) That which is said to be beautiful is said to be approved by respectable artistic opinion or to possess certain qualities in common with many objects which are approved by respectable artistic opinion. (3) That which is said to be beautiful is said to possess certain specific objective properties—usually formal and structural properties which have not been accurately defined. (4) The judgment that anything is beautiful usually carries with it the implied assertion

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that the thing which is judged to be beautiful is valuable and ought to be valued. There are other notions which are sometimes intended in judgments of appreciation, the most usual of which are: (5) That which is said to be beautiful is said to be a successful imitation of nature; and (6) That which is said to be beautiful is said to be a successful exploitation of a medium. But these are less general. The idea of a successful imitation of nature rarely, for example, enters into appreciations of musical art and the 'slick' skill in exploiting a medium is often contrasted with 'true' artistic excellence. The four notions first given are, I think, the most general in the judgments of criticism and appreciation which form the raw material of aesthetic investigation and are usually all four implied, with varying emphasis, in any particular judgment.

But when we turn to examine the critical analyses of the idea of beauty propounded by the philosophers, even this confused core of common meaning evaporates. 'There is no definition of beauty that can be said to have met with universal acceptance.'¹ The tattered army of aestheticians has each his own definition, in the 'truth' of which each has a crusader's faith but to which none succeeds in remaining true.

A convenient table of sixteen types of definition of beauty was drawn up in a lively little volume, *The Foundations of Aesthetics*.² Below is proposed a logical classification of the ways in which beauty has been defined by aesthetic practitioners.

1. *Metaphysical*.

Anything is beautiful which possesses a specific relation to ultimate reality.

2. *Mixed Metaphysical*.

To this class belong theories of classes 4 and 6 which involve latent metaphysical concepts.

3. *Objective Non-Relational*.

3.1. Anything is beautiful which possesses the simple, unanalysable quality beauty.

3.2. Anything is beautiful which has a specific objective structure.

¹ Bosanquet, *History of Aesthetics*.

² By C. K. Ogden, I. A. Richards, and James Wood. (1922.) The table is repeated in *The Meaning of Meaning* by Ogden and Richards.

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4. *Subjective Relational.*

4.1. Anything is beautiful which is related as object, cause or expression to pleasure or emotion.

4.2. Anything is beautiful which is the object or cause of a unique mental state ('unique aesthetic emotion', 'empathy', 'synæsthesis').

5. *Combined Subjective-Objective.*

Anything is beautiful which is *both* potentially an object of a unique mental state (4.2) *and* has a specific objective structure (3.2).

(This view was intended by Clive Bell and Roger Fry. A similar *type* of view is argued in this book.)

6. *Objective-Relational.*

6.1. Anything is beautiful which subserves goodness.

6.2. Anything is beautiful which leads to socially beneficial effects.

6.3. Anything is beautiful which serves the purposes of expression or communication in a particular way.

6.4. Anything is beautiful which is the expression of genius.

6.5. Anything is beautiful which is an imitation of nature.

6.6. Anything is beautiful which results from the successful exploitation of a medium.

(Theories belonging to types 6.1, 6.2, and 6.5 are peculiarly apt through the intrusion of concealed metaphysical notions to fall into class 2.)

It is abundantly clear even from this summary classification that what confronts us in the conclusions reached by previous workers is not a set of attempts to define one and the same notion but a set of definitions or indications of different notions. There is no conceptual element common to all the definitions proposed; they have nothing in common except the word 'beautiful'. The same thing may be pleasant, productive of socially convenient results and an imitation, but it is quite certain that the qualities pleasantness, social utility and imitativeness are three distinct properties and not one and the same property. I take the liberty of paraphrasing what I wrote some time ago after investigating a somewhat similar situation in connection with philosophical

theories of Value. 'Were we asked soberly to believe that all these presumptive definitions or indications of the nature of Beauty endeavour to define or to indicate *the same thing* we should be involved in a veritable philosophical nightmare, in which nothing was itself rather than another thing and anything might seem to be anything at all. It is as fantastically irrational to suppose that the same object should be taken by so many observers to be the relation which arises between a person in a state of profound emotion and the object of his emotion, social utility, and a simple unanalysable property, as it would be to suppose that three men confronted with the same object could describe it severally as a quadruped of the genus *equus*, a rack for the drying of clothes, and an instrument of torture. In order to preserve our mental sanity we must suppose that the "theories of Beauty" are about different things obscured under the same name.¹

If our object were merely to make a linguistic study of all the meanings with which the word 'beauty' is commonly used, a list of definitions such as this would complete the inquiry. All of these notions are sometimes meant, and often a complex of several of them together, when writers and critics speak of beauty. Verbal analysis such as this could have its uses in eliminating unproductive argument among writers on the arts. It is possible for two people to mean quite different things by 'beauty' without realizing that they do so. When they disagree about the beauty of this thing or that they will assume that they are in disagreement about some quality in the thing in question although the only discrepancy may be in their respective linguistic habits. If after analysis they discover that their concepts of beauty are different, i.e. that they mean different things when they describe anything as beautiful, they might discover that they were in complete agreement about the nature of the thing which one called beautiful and the other denied to be beautiful. At any rate it is only possible to decide 'whether they are or are not in agreement about the nature of the thing they are discussing *after* the meanings in which they use the word 'beautiful' are recognized. Thus were the linguistic conventions of art criticism more

¹ *Foundations of the Philosophy of Value* (1933).

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apt to be made explicit, and if writers were more inclined to aspire to consistency in their linguistic usages, much quite unprofitable discussion could be avoided.

1. *Metaphysical Definitions of Beauty*

In this category we place all definitions of beauty in terms of a metaphysical concept. Instances are Baumgarten's definition of beauty as the apprehension of the Absolute through the senses and Fichte's definition of beauty as the objective expression of a 'beautiful soul' and all those definitions in relation to a metaphysical notion of goodness or value.¹ But all metaphysical definitions of beauty are really theories about beauty (its status in ultimate reality, etc.) rather than true definitions of beauty itself, and it would seem unlikely that we could know whether any metaphysical account of beauty is true—or even meaningful—until we had some considerable concrete knowledge about the meaning and nature of beauty itself. There is unlikely to be a profitable discussion whether appreciation of beauty is or is not sensuous apprehension of the Absolute until we understand the psychology of appreciation and the qualities whose presence or absence makes things beautiful or not. We should know how to decide when we are experiencing beauty and when we are not and we should like to understand how this experience resembles and differs from other sorts of concrete experiences in our lives, and what sort of things are beautiful or not, before making up our minds whether or not appreciation of beauty is a short cut into the metaphysical heaven. Before we can determine the metaphysical place of beauty in ultimate reality we must know what beauty is in the context of sub-lunary experience.

2. *Mixed Metaphysical Definitions of Beauty*

More important historically are the mixed metaphysical theories in which metaphysical notions are latent within a theory which purports to be psychological or objective. The mixed metaphysical theories fall into two main groups, which

¹ Hegel defined the beautiful as the Absolute in sensuous existence, the actuality of the Idea in the form of limited manifestation. Absolute spirit is the unity of subjective and objective spirit. We are left to wrestle with the actuality of unbeautiful sense experience as the Theist wrestles with the problem of evil.

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will now be examined. They are: (1) the group which introduces notions of ethical goodness or of ultimate value; (2) the group which holds that things are beautiful in so far as they imitate, express or communicate some metaphysical reality 'behind' or in addition to the natural object imitated or expressed. If the metaphysical reality in question is held to be a form of metaphysical goodness or value, theories of the second group will have close affinities with those of the first. The influence of these mixed metaphysical theories will be found to be very prevalent in practical criticism and appreciation to-day, although the explicit and conscious formulation of metaphysical notions of beauty has gone somewhat out of fashion. It is so insidious an influence that an understanding of the philosophic nature of this group of theories is perhaps the most necessary of all to practical criticism and appreciation.

2.1. *Mixed Metaphysical Theories which connect Beauty with Metaphysical Value or moral Goodness*

It is easy to muddle the statement that beauty has value with the statement that beauty is a form of value. And if one adopts a psychological theory of value ('to say something is valuable means that people have a disposition to experience favouring emotions towards it') and a psychological theory of beauty ('to say something is beautiful means that people have a disposition to experience towards it emotions which they tend to favour'), beauty may be a kind or category of the wider determinable value. But in the metaphysical sense this is not so. The view so frequently taken that Truth, Beauty and Goodness are three forms of one ultimate or ideal metaphysical value is based upon a popular linguistic fallacy. There is, in philosophic language, no one determinable Value, under which Truth, Beauty and Goodness are ranged as determinates. The experiences we describe as awareness of truth, appreciation of beauty and goodness of action and character are valuable experiences, but the abstract properties Truth, Beauty, Goodness are neither valuable in abstraction from experience nor forms of a higher abstract Value.

It may be reasonably held and has usually been held that value and beauty are connected in that anything which is beautiful has intrinsic value in respect of its beauty and (apart from extraneous

sources of value) in proportion to the degree of its beauty. But if, as seems probable, only states of affairs which are or contain states of human consciousness are intrinsically valuable, it would only be correct to say that the appreciation of beautiful things is valuable and that beautiful things themselves are potential sources of value (or have instrumental value) in that they provide the opportunity for the coming into existence of appreciation, which alone is intrinsically valuable. But it should not be forgotten that even the proposition that the appreciation of beauty is valuable in itself is neither a self-evident nor a universally accepted proposition.

There is deeply engrained in human nature an ascetic instinct, which has been fostered by certain phases of the Christian religion and others, leading men to condemn as morally evil the pleasurable activities of the senses in and for themselves and to condemn the arts and beauty as the most intense form of these activities. In his *Republic* Plato, taking notice of the fact that art is imitative and regarding imitativeness as in itself bad, would banish almost the whole of accredited art from his ideal state—'with the single exception of hymns to the gods and panegyrics on the good, no poetry ought to be admitted into a state'. (*Rep.* 607) Plato was an artist and sensible to the attraction and enchantment of artistic beauty; he does not condemn art, as does the typical Puritan, because of this attractiveness, but believing it to be socially harmful for other reasons he regards its attractiveness as an additional reason for stringency in banishing it.¹ After his conversion St. Augustine repented of his youthful interest in the beautiful when he even wrote an aesthetic treatise, *De Pulchro et Apto*. But there have been few people who have been able to derive such complacent satisfaction from repentance as Augustine. Among the moderns Tolstoi, himself an artist and a man of wide sensibility to beauty, was led by certain religious and sociological doctrines to condemn the notion that a thing is good because it is beautiful and to reject the great majority of accredited works of art as socially evil. His book *What is Art?* was written in condemnation of the assumption of 'civilized European society of our class and day, in favour-

¹ See also Aristotle, *Politics*, 1340 a 26.

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ing any art if it but serves beauty, i.e. gives people pleasure'. Tolstoi held that the function of art is the communication of feelings and that only those works of art are good (socially beneficial) which are vehicles of communication to all classes of society and which communicate feelings of brotherhood and respect. 'If art has been able to convey the sentiment of reverence for images, for the eucharist, and for the king's person; of shame at betraying a comrade, devotion to a flag, the necessity of revenge for an insult, the need to sacrifice one's labour for the erection and adornment of churches, the duty of defending one's honour or the glory of one's native land—then that same art can also evoke reverence for the dignity of every man and for the life of every animal; can make men ashamed of luxury, of violence, of revenge, or of using for their pleasure that of which others are in need; can compel people freely, gladly, and without noticing it, to sacrifice themselves in the service of man. The task for art to accomplish is to make that feeling of brotherhood and love of one's neighbour, now attained only by the best members of the society, the customary feeling and the instinct of all men.'

Works of art are social objects, engage human interest and among their other functions subserve social purposes and produce moral effects, as do sermons and penal laws. It is possible to assess their moral rating just as it is possible to assess the moral rating of any other object which enters into the structure of human society and which arouses human interest and activity. From his own point of view the sociologist is justified in condemning the whole of art or any part of it, if he thinks that its social influence is bad. But such judgments lie outside the province of aesthetics, which is concerned only to understand the beautiful and to discriminate what is beautiful and what is not. To judge about the moral influences of a work of art is not to judge about its beauty. Emphasis upon the moral or sociological point of view leads, however, to the social utility type of theory. Tolstoi held that art and beauty are valuable only in so far as they serve the purpose of improving the religious or moral disposition of mankind. Ruskin and his followers held that beauty *consists in* effectiveness for religious or moral uplift—a very different thing. The latter view reduces aesthetics to a branch of social morality and removes the logical basis for discriminating

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a class of beautiful things distinct from the class of things which are socially beneficial.

An allied group of theories incorporates latent metaphysical notions of value with a psychological definition of beauty, whether they merely hold that a beautiful thing must stimulate a 'lofty' emotion or whether they hold that appreciation of beauty involves the intuition of some lofty value. The former view was maintained by Ozenfant. 'Generally, the beautiful is said to be what pleases, but that is false. Great Art is that which elevates. . . . Masterpieces are practically never pleasing. Their effect upon us is too striking for the definition of "pleasing" to have any true application. . . . All we can say is that the feeling of elevation gratifies us. To say it pleases us is, as an explanation, inadequate. The truth is that a masterpiece inevitably calls forth strong emotion: some feel pleasure because of this emotion, but others feel pain: we must have nobility ourselves to be able to support grandeur. Beauty, one of man's essential yearnings, is the feeling of being raised up.'¹ Of the latter Mr. Clutton-Brock was typical: 'Art is the expression of a certain attitude towards reality, an attitude of wonder and value, a recognition of something greater than man; and where that recognition is not, art dies.' Analogous is a very popular group of 'communication' theories, most notably developed in the Bergsonian literature, which maintains that art is the product of men of genius; that genius is exceptional sensitivity to values; and that by the medium of art the man of genius communicates to others his more sensitive or elevated value perceptions.

Again it must be said that any assessment of the value (moral or metaphysical) of emotions aroused in the appreciation of art or of the valuations concretized by the artist in his work lies outside the sphere of aesthetics. If you appeal to value or goodness for a criterion in discriminating the beautiful from the non-beautiful, you must, ultimately, reduce aesthetics to ethics.

The relation of beauty to value may be summed up, then, as follows: (1) The appreciation of beautiful things may be, as it is

¹ *Foundations of Modern Art*, pp. 300-3. Such language may imply a pure psychological definition in terms of some strong 'elevated' emotional feeling distinct from the mere feeling of pleasure. But almost inevitably the implication of metaphysical value is drawn in.

usually adjudged to be, a thing valuable in itself. (2) Representational works of art may be, but need not be, vehicles for the communication and propagation of extra-aesthetic valuations. Aesthetics is not called upon to decide whether the appreciation of beautiful things is or is not valuable in itself. It is not its function to decide whether the valuations communicated by any particular work of art are false or true, whether its effects are socially beneficial or vicious. Its function is to decide what things are beautiful and what we mean by saying that they are beautiful. It is the function of the Deity alone—aided by the sociologist—to evaluate all human valuations, aspirations and cultures. This discrimination of functions has not hitherto been clearly made, but once the limitation has been grasped and approved it should not be a difficult matter for the aesthetician of humble and reasonable temperament to abide by it.

Theories of this type—i.e. those which *conceal* a metaphysical notion of value or goodness—especially if the theories themselves are not fully conscious, are the expression of a very prevalent attitude in the appreciation of art which is responsible for all those pseudo-aesthetic judgments which, while professing to assess the beauty of a work of art, are in fact, evaluations of its representational content from a moral ground. The attitude has not infrequently been consciously professed by practising artists who, however, if they were worth-while artists, unconsciously controlled their work by other and very different canons of aesthetic beauty.¹ Its influence has been so pervasive and so pernicious that we feel justified in pausing to examine its ramifications a little more fully.

The literary and the plastic arts spring from a dual impulse or, it would be more correct to say, from the fusion of two impulses, representation and creation. That which the work of art represents—its subject matter—I shall call the *theme*. The way in which the theme is expressed in the artists' medium (stone, pigment, words) is its *form*. When we say that any work of art is representational we mean that it re-presents, or presents an image or

¹ An outstanding example is provided by artists of the pre-Raphaelite school. During the Renaissance this moral criterion was erected into one of the two accepted principles of artistic beauty and was propounded and demanded under the formula of *la gran maniera*. (See the quotation from Reynolds below.)

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symbol of, something outside itself, something of which we have or could have experience, real or imaginal, apart from the work of art. That which is represented, the subject matter or theme, belongs to the context of life as a whole and only comes within the sphere of aesthetic experience through the fact of its representation. Our emotional reactions to it, or our valuational attitudes to it, *as pure subject matter*, are those which we know in real life towards the real thing. The valuations which we bring to the theme *as such*, and in isolation from the form, of a work of art are the valuations of life. Fully to appreciate the great masterpieces of representational art it is necessary, no doubt, that we should be capable of savouring and reproducing in ourselves the understanding of the richness and variety of experience, of feeling and valuation, which the artist has symbolized and communicates in his theme. But it is not part of the duty of the aesthetician to evaluate the theme of representational works of art; to do so would be to usurp the function of the moralist. Aesthetics is concerned only with the use which the artist makes of his chosen theme, with its enforming in the work of art.

Hence judgments and valuations of the theme of a work of art in and for itself are not correctly called aesthetic and are alien to the science of aesthetics. I shall endeavour to make this important limitation clearer by examples.

The first example is from Holman Hunt's *Pre-Raphaelitism and the Pre-Raphaelite Brotherhood*. 'It was Carlyle's second visit to my studio that best revealed the inner nature of the man, when "The Awakened Conscience" and "The Light of the World" were just completed. He spoke approvingly of the first, but without any artistic understanding of the effect, he pointed to the reflection of the green foliage into the shining table and said: "The moonlight is well given"; turning to the other, he spoke in terms of disdain. "You call that thing, I ween, a picture of Jesus Christ. Now you cannot gain any profit to yourself except in a mere pecuniary sense, or profit any one else on earth, in putting into shape a mere papistical fantasy like that, for it can only be an inanity, or a delusion to every one that may look on it. It is a poor mistaken presentation of the noblest, the brotherliest, and the most heroic-minded Being that ever walked God's earth. Do you ever suppose that Jesus walked about bedizened

in priestly robes and a crown, and with yon jewels on His breast, and a gilt aureole round His head? Ne'er a crown nor pontifical robe did the world e'er give to such as He. Well—and if you mean to represent Him as the spiritual Christ, you have chosen the form in which He has been travestied from the beginning by worldlings who have recorded their own ambitions as His, repeating Judas's betrayal to the high priests. You should think frankly of His antique heroic soul; if you realized his character at all you wouldn't try to make people go back and worship the image that the priests have invented of Him, to keep men's silly souls in meshes of slavery and darkness. Don't you see that you are helping to make people believe what you know to be false, what ye don't believe yourself? The picture I was looking at just now of the shallow, idle fool and his wretched victim had to do with reality; this is only empty make-believe, mere pretended fancy, to do the like of which is the worst of occupations for a man to take to."

This criticism is entirely a criticism of theme in itself and apart from the enforming of the theme by the artist into a work of art. It would apply as well to *any* representation of this theme, to the crudest illumination on a church calendar. The artist and his critic differed in their conception of Christ, and this is a matter of Christology, of religious belief, and not of aesthetic criticism. Such criticism is perfectly justified, because by painting that picture the artist was indicating his belief in, or giving active support to, a doctrine which Carlyle believed to be false and pernicious. But the difference is outside the scope of aesthetics.

I will give a second example from literature. Dr. Johnson said of the *Paradise Lost* that it is 'a poem, which, considered with respect to design'—he means by this what we have meant by *theme*—'may claim the first place, and with respect to performance, the second, among the productions of the human mind'. Mr. T. S. Eliot writes that 'Milton's celestial and infernal regions are large but insufficiently furnished apartments filled by heavy conversation'. In so far as these judgments differ they differ mainly in respect of the authors' conflicting valuational attitudes to Christian mythologies. Unless and until all our valuational attitudes in life are brought into accord, it is obvious that people will differ in their reactions and valuations of the theme or sub-

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ject matter of such works of art as represent subjects towards which we are accustomed to adopt emotional or valuational attitudes in life. Such differences are outside the purview of the science of aesthetics, although they are inevitably a part of our total response to such works of art and ought to be voiced when we are considering works of art as part of the complete life and social activities of mankind.

Representational art is not something apart from the rest of life and life's valuations. The artist is apt to concern himself with, and operate actively towards, extra-aesthetic values in the following way. He presents the idea or object which is his theme (and towards which in life a specific valuational attitude is presumed) under specific forms; these forms, as forms, excite in us emotions such that in the fused or unified experience of appreciation our emotional or valuational response to the theme is changed or enhanced because of the form with which its presentation is endowed in the work of art. Thus works of art exercise an influence outside the sphere of aesthetics. How this is done, the mechanics of the process, is ultimately a problem for aesthetics when it has prepared the way to its solution by investigating more immediate problems. But whether in each case the resulting influence is good or bad, whether the chosen theme has great or little value in itself, is a problem of moral or sociological and not aesthetic valuation.

In view of this I would like to make a distinction between the 'beauty' of a work of art and its 'greatness'.¹ The theme or subject-matter of certain works of art has 'greatness' in that it represents richness or intensity of human experience, experience which in life would be usually judged to have great value, and to be the inspiration and achievement of a personality which would be judged to be great. In other works of art the theme has no greatness, is unimportant or indifferent. Yet the 'beauty' of works of art cannot be estimated by the 'greatness' of the theme. There may be very great formal perfection, exquisite beauty, in a work whose theme is slight. Confusion between judgments of greatness and formal beauty has been very damaging to critical and aesthetic literature.

That this distinction between formal beauty and what we have

¹ I owe the idea of this distinction to the late Professor S. Alexander.

called 'greatness' is exact and that the former only is specific to aesthetics, is proved by the following facts: (1) A work of art whose theme is slight may be judged to have much greater beauty or aesthetic value than one of more magnificent theme. A lyric by Herrick or Blake is not judged to be less beautiful than Crabbe's 'The Village' or Browning's 'The Ring and the Book'. Wordsworth's 'Daffodils' is slighter but not less beautiful than 'The Excursion'. A still life by Juan Gris or a fantasy by Paul Klee is not judged to be less beautiful than Stanley Spencer's 'The Resurrection', the religious paintings of Mideros or the murals of Diego Rivera. A Bach Chorale is not judged to be less beautiful than Handel's 'Messiah'. (2) It often happens that the theme of a work of art in course of time loses the emotion and valuational significance which it had for the artist who made it and for his public. Yet appreciation is not impeded when this happens. There are, to select one example from many, Aztec carvings which originally had religious significance and must have had great power in evoking religious emotion and an important influence in the life of the community. Their significance is now gone; the power of the theme to evoke emotion is almost if not quite lost. Yet they can still be appreciated and it seems not improbable that—although something of the total-response of the people among whom they were made is inevitably departed—the qualities of their formal beauty, now experienced in isolation from the emotional effects of theme, may be apprehensible even more intensely to us by reason of this very isolation. So, too, Indian religious art can be appreciated by people who have no knowledge of and are not moved by the doctrines of Indian religion and philosophy. Egyptian and Chinese mortuary sculpture does not require for its artistic appreciation that we share the beliefs by which its creation was inspired. (3) Much art, including the greater part of music, architecture and decorative art and some painting and sculpture, has no theme in the sense of representational content. Yet beauty judgments applied to such objects of art are not different in kind from those applied to representational art. (4) Many artists and others are accustomed when appreciating consciously to abstract from the theme of a work of art and to concentrate solely upon its formal qualities. This power may be acquired and is in some measure necessary

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to the training of appreciation. It is, indeed, sometimes argued nowadays that theme is irrelevant. And there are extremists who go so far as to say that since beauty is constituted solely by the formal qualities of a work of art, theme is both superfluous and distracting and all art should be non-representational. Representational art, they hold, is a stage in the development towards abstract or non-representational art.

These extremist views are erroneous deductions from an imperfectly realized truth. Formal beauty—or, as it used to be called, ‘pulchritude’—is a necessary condition without which it is impossible that a construction can be a work of art or have aesthetic excellence or beauty. As a matter of contingent fact there can be formal beauty without theme and non-representational art can exist as art. But even so it does not follow that the representational element in representational art is irrelevant either to its beauty or to its total human value. If you imagine a hypothetical instance of two works of art, the one representational and the other abstract, whose purely formal beauty we will suppose to be equal, the former has an additional value deriving from its representational or symbolic significance. Apart from this, when works of art are representational this fact cannot ultimately be divorced from the consideration of their formal beauty, for two reasons. First there is, or should be, a certain congruity between the emotions deriving from the theme and the emotions evoked by the forms. And, second, there are certain specific reasons, depending on the mechanics of perception, why in any work of art that is representational the fact that it is so becomes an integral element in its purely formal properties and in general representational meaning perceptually adds to the complexity and richness of formal structure.

Formal beauty is a necessary condition for a work of art and a constant of appreciation. Concentration upon form alone when a work of art is representational is artificial and an emasculation of the full act of appreciation if used as more than an exercise. Seriously to ignore the representational significance of works such as Goya's *Don Quixote*, Chirico's *Les Platoniciens*, the *Portrait of Confucius* by Ma Yuan, or Picasso's *Guernica*, would be straining theory to absurdity. Abstract painting and sculpture aspire to eliminate the representational impulse and retain only

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the creational. How important they will become it is perhaps too early as yet to say.

In many representational works of art the theme has little emotional or valuational significance except of a casual and negligible kind which varies from person to person. Such works—many still lifes are good examples—differ from abstract works chiefly in the added perceptive complexity which is introduced by the fact that the shapes have perceptual meaning. But when the theme has deep emotional significance and contact with important valuations in life the case is different. The total appreciative response to such works always includes attitudes towards the valuations symbolized or concentered in the theme. The importance assigned to this element in artistic creation has varied from time to time. It was especially high during the period of the Romantic Revival and is at present rather self-consciously underrated. The point which I have tried to make clear is that these valuational attitudes, although an intrinsic and necessary element in the total appreciative response to certain works of art, including many of the greatest masterpieces of genius, are not within the domain of aesthetics. Theoretically they are non-aesthetic valuations of the work of art as a social object, and are analogous to valuations of heroic actions, noble personalities or great sermons.

(2. 2.) *Mixed Metaphysical Theories of the Imitation Type*

Theories of aesthetics which have been developed historically in close connection with the arts of painting and sculpture have always tended to lay predominant stress upon *imitation* either in the naïve sense of the power to create sensory illusion or in combination with some metaphysical notion of reality.

The new classicism of the Renaissance recognized two standards of excellence in art, realism and nobility. Realism, or verisimilitude as it was called, is the quality which a work of art may have of producing in the spectator the illusion that it is not a work of art but the object itself which it represents. That this quality was a mark of excellence in a work of art was an aesthetic commonplace of the period. It was assumed that it is of the essence of a painting to be a copy of something else and the corollary was drawn that the more exact and 'life-like' the copy,

the better the painting. Vasari, who though not of outstanding insight was a very typical representative of the cultivated aesthetic outlook of his day, always takes this view for granted and delights to introduce stories to rival those of Pliny and Aelian, that the strawberries in a fresco by Bernazzone were pecked by peacocks, the dog in a picture by Francesco Monsignori was attacked by a real dog, and so on. His highest praise is that the objects in a picture might be mistaken for real objects. Leonardo said in his *Treatise on Painting* that that painting is most praiseworthy which has the greatest conformity with the thing imitated. Boccaccio wrote of Giotto that he was 'of so excellent a wit that, let Nature, mother of all, operant ever by continual revolution of the heavens, fashion what she would, he with his style and pen and pencil would depict its like in such wise that it shewed not as its like, but rather as the thing itself, insomuch that the visual sense of men did often err in regard thereof, mistaking for real that which was but painted' ('Decameron', Day VI, Novel V). The era of experimental abstract painting and sculpture saw a vigorous reaction against this view of the function of art, though it still remains fundamental to the spontaneous attitudes of the layman.

Nobility of subject-matter or theme—the second requisite of Renaissance art theory—was summed up in the dictates of the Grand Style (*la gran maniera*). In English it is most popularly represented by Sir Joshua Reynolds. "The painters who have applied themselves more particularly to low and vulgar characters, and who express with precision the various shades of passion, as they are exhibited by vulgar minds (such as we see in the works of Hogarth), deserve great praise; but as their genius has been employed on low and confined subjects, the praise which we give must be as limited as its object. The merry-making, or quarrelling of the boors of Teniers; the same sort of productions of Brouwer, or Ostade, are excellent in their kind; and the excellence and its praise will be in proportion, as, in those limited subjects, and peculiar forms, they introduce more or less of those passions, as they appear in general and more enlarged nature. This principle may be applied to the battle-pieces of Bour-gognone, the French gallantries of Watteau, and even beyond the exhibition of animal life, to the landscapes of Claude Lorrain,

and the sea views of Vandervelde. All these painters have, in general, the same right, in different degrees, to the name of a painter, which a satirist, an epigrammatist, a soneteer, a writer of pastorals or descriptive poetry, has to that of a poet. In the same rank, and perhaps of not so great merit, is the cold painter of portraits. But his correct and just imitation of his object has its merit. Even the painter of still life, whose highest ambition is to give a minute representation of every part of those low objects which he sets before him, deserves praise in proportion to his attainment; because no part of this excellent art, so much the ornament of polished life, is destitute of value and use. These, however, are by no means the views to which the mind of the student ought to be *primarily* directed. Having begun by aiming at better things, if from particular inclination, or from the taste of the time and place he lives in, or from necessity, or from failure in the highest attempts, he is obliged to descend lower, he will bring into the lower sphere of art a grandeur of composition and character, that will raise and ennoble his works far above their natural rank.¹

The two standards in accepted aesthetic theory at this time were, then, nobility of subject represented (a moral criterion as has been shown) and technical proficiency in creating verisimilitude or the illusion of reality.

The aesthetic doctrine of the Renaissance was partly derived from late Latin authors, whose theory of imitation received credit from rapid contemporary developments in realistic devices, such as the use of perspective and chiaroscuro, in painting. A partiality for three-dimensional pictorial form, or the creation of a visual illusion of solidity and spatial depth, has also been a characteristic of most Italian painting. To anyone enclosed within this tradition its partiality for three-dimensional illusion of depth in painting in preference to other characteristics such as are the aim, for instance, of Persian painting, medieval illumination or in their different ways Greek, Chinese and Peruvian vase decoration, would naturally lend a greater speciousness to the doctrine of verisimilitude than it would otherwise possess. 'The painter's business is to design and paint any given bodies with lines and colours in such a manner that *whatever is*

¹ *Third Discourse.*

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painted may appear prominent and be as like as possible to those given bodies.' With this formula Alberti in his *Treatise on Painting* summed up an aesthetic commonplace of his age.

The increase in modern times of mechanical methods of reproduction such as photography has done much to discredit the view that imitation as such is constitutive of beauty and the gradual increase of interest during the Romantic Age in the characteristic and individual, including the 'ugly' in nature (e.g. Rodin's *La Vieille Heaulmière*), has put out of fashion the Grand Style, except perhaps in official art and portraiture.¹ But the demand for realism in the sense of crude imitation combined with the power to evoke facile pleasure or to arouse pleasant memories is still the most common criterion in popular reactions to painting and sculpture and is still a powerful influence in practical appreciation of these arts. Many people like to hang pictures whose scene reminds them of a pleasant summer holiday. Mr. Wilenski displays interest in the fact that some people like pictures for such reasons as 'the dog in the corner reminds me of my own dog, "Tim"', and argues that such reasons for selecting pictures are justified.² When this happens the owner of the pic-

¹ Romanticism transferred emphasis from realism to expression, which was often confused with the power to evoke an intense or an approved emotion.

² See *The Study of Art*, p. 34. In an essay entitled 'Art and Ideas', W. B. Yeats begins: "Two days ago I was at the Tate Galleries to see the early Millais's, and before his "Ophelia" as before the "Mary Magdalene" and "Mary of Galilee" of Rossetti that hung near, I recovered an old emotion. I saw these pictures as I had seen pictures in my childhood. I forgot the art criticism of friends and saw wonderful, sad, happy people, moving through scenery of my dreams. The painting of the hair, the way it was smoothed from its central parting, something in the oval of the peaceful faces, called up memories of sketches of my father's on the margins of the first Shelley I had read, while the strong colours made me half remember studio conversations, words of Wilson, or of Potter perhaps, praise of the primary colours, heard, it may be, as I sat over my toys or a child's story-book." Only by the inexcusable intrusion of an intolerable conceit could one deny that such experiences as these are 'justified'. They are the sort of experiences from which a certain kind of literary art is moulded. But such enjoyment of associative memories is not aesthetic appreciation of the works of art; it is a personal and individual enjoyment in which the picture serves as a 'utility' object to arouse trains of valued memories and associations; it lies outside the aesthetic appreciation of artistic beauty. And by the same analogy we cannot, as aestheticians, condemn the man who chooses his pictures not for their artistic excellence but for their associative values. It is for the moralist or

ture is not making an aesthetic judgment or using it as a work of art; he is using it as a convenient instrument for stimulating a pleasant recollection. It is not for the aesthete to praise or blame such uses of works of art or such reasons for selection. Praise and blame are the prerogative of the parson and the judge. But the aesthete should make evident the confusion involved in mistaking such uses and such preferences for aesthetic appreciation and should exercise all his available energy to deplore a state of society in which such confusion is prevalent. The man who judges the literary value of books from their wrappers can hardly pass for a competent literary critic; yet the assessment of works of plastic art by their usefulness for evoking pleasant recollections is often mistaken for aesthetic criticism. 'To have a landscape stir up the pleasant memory of a familiar scene, or a portrait that of a friend, is merely to recognize not to perceive; that is, to refresh one's memory, not to grow in experience by increasing the value of what one already knows through perception of new relationships and values. Recognition, in other words, is seeking a resting place in the past instead of being alive in the present.'¹

The criterion of imitative realism combined, as it often is, with the pleasure-theory is implicit in the following appreciation of Henry Moore's sculpture from Professor Herbert Maryon's *Modern Sculpture*. Of Henry Moore's 'Mother and Child' (a figure in Ham Hill stone) he writes: "Taking the human form as his "material", he endeavoured to make an arrangement of interrelated masses, considered solely as "form", which would satisfy his personal taste. While we may admit that that was his aim, I do not think that it is possible to arrive at any satisfactory conclusion as to why that particular arrangement satisfied him. That is an entirely personal matter, upon which one man may justly differ from another. If I am asked whether I feel satisfied with that result, that arrangement of forms, as forms, I frankly reply that I am not. Yet there are some folk to whom the result

the sociologist to evaluate different types of human character and experience. The aesthete should only protest against any tendency to confuse this type of response to works of art with their aesthetic appreciation.

¹ *The Art of Renoir*, p. 10. Barnes and de Mazia.

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is satisfactory, so I must leave it to them. . . . I am personally unable to dissociate my knowledge of the human form from any work which suggests a human form as to remain satisfied with more than a certain amount of distortion, unless some other quality renders the distortion a matter of minor importance. Emphasis or caricature I can accept; omission or blurring of detail I can accept. But beyond a certain limit of distortion there is the likelihood that the work will give me so strongly a hint of disease or of deformity that, on balance, the work repels.¹ Of the work of Gaudier he writes: 'The next stage in the degradation of the human form (after Rosandic) brings us to Gaudier-Brzeska. Like some others of the younger generation of sculptors he was intolerant of the limitations of the human form. He wished to "create sculptural form", to build up fragments of organic form into a new synthesis. His most characteristic effort is the "Seated Figure". The result suggests a pathological specimen, a kind of sub-human monster—which some folk profess to admire. They claim that such a rearrangement of forms is a new creation of form for its own sake. But to me this work suggests degeneration of form instead of re-creation. I miss also

¹ I cannot refrain from quoting a parallel from George Lansing Raymond, L.H.D., formerly Professor of Aesthetics in Princeton University, who represents the unsophisticated attitude to art which prevailed at the beginning of the century, as Maryon represents that of the thirties. In the Introduction to *Art in Theory* he writes: 'As most of us know, Mr. Beardsley's name is sometimes mentioned by prominent and able American critics with a certain degree of respect, owing to his manifestation, it is said, of originality and invention. One cannot refrain from feeling that further reflection would cause these critics to withhold anything in the direction of actual commendation. The truth is that Mr. Beardsley's work was legitimate neither to decorative painting nor to figure-painting. Decorative art, like architecture, should fulfil certain mathematical laws controlling the intersection and curvature, the balance and symmetry, of lines, as well as certain physical laws controlling concord and contrast of colours, introducing figures, if at all, only in a subordinate way. These principles of decorative art Mr. Beardsley's work did not fulfil. Figure-painting, though partly fulfilling the same principles, subordinates them to the reproduction of natural appearances. Yet Mr. Beardsley failed to reproduce these appearances with accuracy, showing either that he did not know how to observe or that he did not know how to draw, or, at least, failed to manifest the results of his knowledge.' The seven volumes of Professor Raymond's *System of Comparative Aesthetics* (published at the Knickerbocker Press) are an unexplored source of delight.

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that characteristic refinement of line which is found throughout nature, and reaches its highest power in the human figure.'

The aesthetic outlook of classical Greece assumed as self-evident that the essential and distinguishing feature of fine art is its imitative character. The fine arts were called 'mimetic' to distinguish them from the useful arts of craftsmanship. Even music and dance were regarded as imitative in a rather more recondite sense. The theory is given philosophic development by Plato, who held that as natural objects and the products of the useful arts are 'imitations' of eternal, supersensible ideas, which alone are real, so the creations of the fine arts are imitations of imitations and therefore twice removed from reality and doubly imperfect. I quote from the *locus classicus* in the *Republic*.¹ "Do you not see that there is a way in which you could make them yourself?—there are many ways in which the feat might be accomplished, none quicker than that of turning a mirror round and round—you would soon make the sun and the heaven and the earth and yourself, and other animals and plants, and all the other creatures of art as well as of nature in the mirror."

"Yes," he said, "but that is an appearance only."

"Very good," I said, "you are coming to the point now; and the painter, as I conceive, is just a creator of this sort, is he not?"

"Of course."

"But then I suppose you will say that what he creates is untrue. And yet there is a sense in which the painter also creates a bed?"

"Yes," he said, "but not a real bed."

"And what of the manufacturer of the bed? Did you not say that he does not make the idea which, according to our view, is the essence of the bed, but only a particular bed?"

"Yes, I did."

"Then if he does not make that which exists he cannot make true existence but only some semblance of existence; and if any-one were to say that the work of the manufacturer of the bed, or of any other workman, has real existence, he could hardly be supposed to be speaking the truth. No wonder then that his work too is an indistinct expression of truth.—Well then here are three beds, one existing in nature which as I think that we may say, is

¹ Book X. Jowett's translation.

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made by God—there is another which is the work of the carpenter. And the work of the painter is a third? Beds then are of three kinds, and there are three artists who superintend them: God, the manufacturer of the bed, and the painter?—God, whether from choice or necessity, created one bed in nature and one only.”

“And what shall we say of the carpenter; is not he also the maker of the bed?”

“Yes.”

“But would you call the painter a creator and maker?”

“Certainly not.”

“Yet if he is not the maker, what is he in relation to the bed?”

“I think”, he said, “that we may fairly designate him as the imitator of that which the others make.”

“Good,” I said, “then you call him who is third in the descent from nature an imitator; and the tragic poet is an imitator, and therefore like all other imitators he is thrice removed from the king and from truth?”

“That appears to be the case. Then about the imitator we are agreed. And now about the painter; I would like to know whether he imitates that which originally exists in nature, or only the creations of craftsmen.”

“The latter.”

“As they are, or as they appear? You have still to determine this.—I mean, that you may look at a bed from different points of view, obliquely or directly or from any other point of view, and the bed will appear different, but there is no difference in reality. Which is the art of painting—an imitation of things as they are, or as they appear—of appearance or of reality?”

“Of appearance.”

“Then the imitator”, I said, “is a long way off the truth, and can do all things because he only lightly touches on a small part of them, and that part an image. For example: a painter will paint a cobbler, carpenter, or any other artificer, though he knows nothing of their arts; and if he is a good artist, he may deceive children or simple persons when he shows them his picture of a carpenter from a distance, and they will fancy that they are looking at a real carpenter. And whenever anyone informs us that he has found a man who knows all the arts, and

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all things else that everybody knows, and every single thing, with a higher degree of accuracy than any other man—whoever tells us this, I think that we can only imagine him to be a simple creature who is likely to have been deceived by some wizard or actor whom he met, and whom he thought all-knowing, because he himself was unable to analyse the nature of knowledge and ignorance and imitation. And so when we hear persons saying that the tragedians and Homer, who is at their head, know all the arts and all things human, virtue as well as vice, and divine things too, for that the good poet must know what he is talking about, and that he who has not this knowledge can never be a poet, we ought to consider whether here also there is not a similar illusion. Perhaps they may have been deceived by imitators, and may never have remembered when they saw their works that these were but imitations thrice removed from the truth, and could easily be made without any knowledge of the truth, because they are appearances only, and not real substances? Or perhaps after all they may be in the right, and poets do really know the things about which they seem to the many to speak well?—Now do you suppose that if a person were able to make the original as well as the image, he would devote himself to the image-making branch? Would he allow imitation to be the ruling principle of his life, as though he could do nothing better?—The real artist who knew what he was imitating, would be interested in realities and not in imitations; and would desire to leave as memorials of himself works many and fair; and instead of being the author of encomiums, he would prefer to be the theme of them.”

The view that art is in its essence imitation lay at the basis of Plato's rejection of it from his ideal state. Plato held that natural or perceptible objects are imperfect copies of supersensible or 'ideal' objects. Works of art are reproductions of sensible objects. Art, as the copy of a copy, is therefore in principle doubly illusory and doubly imperfect.

Later (and this theory may possibly have been held by Plato himself at a later time) those who accepted Plato's metaphysics but disliked his rejection of art evolved the theory that works of art are not merely copies of the imperfect objects of sense but are concrete images of the beauty of 'ideal' objects which are imper-

fectly realized in sensible objects. Thus the artist can improve on nature by reference to the ideal. This view is expressed by Cicero in the following passage (*Orat.* 11,7): 'For I would have you understand that in all the world of variety there is nothing so fair that it has not something fairer which is the pattern from which the fair is drawn, as a portrait from a face; a *type* which the eye cannot see nor the ear hear nor any sense perceive, but which we apprehend by thought and reason only. And so, though we can see nothing more perfect of their kind than the representations of Phidias or those pictures which I have named, yet we can imagine a fairer than them both. And it was on no living model that the famed artist gazed for inspiration when he moulded the image of Jupiter or Minerva, but deep in his soul there was a matchless pattern of beauty on which he ever looked and fixed his eyes unswervingly and to whose similitude he guided his hand and art.' In its cruder form this theory simply maintained that the artist can improve on nature by omitting the 'imperfections' which characterize any particular natural object. Hence the story, a commonplace of classical and Renaissance aesthetic literature, that in order to paint a perfect goddess Zeuxis selected the five most beautiful maidens available and combined their several excellences, omitting the imperfections of each, into one supremely beautiful whole. It has very recently been maintained from Sweden that a composite photograph of any fifteen or twenty girls' faces selected at random will give an ideal type of female beauty. The theory depends upon the assumption that for every class of object (human bodies, horses, apples) there is an ideal type to which all concrete instances approximate in various degrees and that the type is supremely beautiful. It was frequently held that the beauty of the ideal type is expressible in mathematical formulae and through the Renaissance this belief was a commonplace of aesthetics.

This trend of thinking may issue in the mystical doctrine of Plotinus,¹ common also to Indian aesthetics,² that the artist

¹ Plotinus, *Ennead*, v, viii, 1. 'If anyone belittles the arts on the ground that they imitate and copy nature, first it must be said that natural objects also imitate other things; secondly it should be recognized that the arts do not simply copy what is seen, but go behind the visible to the principles of its nature; thirdly that they are to a considerable extent creative on their own

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attains and communicates a vision of a more ultimate, super-sensible reality, which lies behind the apparent reality of perceptible objects.

From here it is only a step to the metaphysical theory proper, that art is an imitation or expression of some ultimate spiritual reality behind and above the world of sense perception and that when we appreciate a work of art we obtain immediate intuitive contact with this higher reality. Lotze's 'preliminary designation' of beauty is 'the appearance to immediate intuition of a unity' between the realm of universal laws, the realm of real substances and forces, and 'the definite and specific plan according to which these elements of reality are brought together under each other, in order to realize a definite end by their actions according to universal laws'. So Coleridge said: 'The artist must imitate that which is within the thing, that which is active through form and figure, and discourses to us by symbols—the Natureist, or spirit of nature.' This sort of mysticism is not absent from contemporary art criticism. 'Even the most drastically non-representational work of art, if produced by an artist who consciously or unconsciously apprehends the formal character of natural structures, may be "true to nature" in this larger sense of the symbolization of natural form. Examples could be multiplied *ad infinitum*. Set photographs of the Rajarani and Lingaraja temples in Bhuvaneshvari next to Professor Blossfeldt's photographs of winter horsetail and asparagus, or Professor Blossfeldt's photographs of branched stems of Indian balsam and balsamine next to brass candelabra by a craftsman in tune with natural form, and the conclusion is bound to be the same. After such studies we are bound, I submit, to realize that the naturalistic sculptor's clay figure made to imitate the shape of Miss Jones, the artist's model, without her clothes, and the clay figure made to record the Romantic artist's excitement at the departures from the normal (which he will call "character") of Miss Jones's body, are both only "true to nature" in a very limited and minor sense, because Miss Jones after all is only Miss Jones, and the works take no account of Miss Brown and Miss Robin-

account, and make additions where the natural object is lacking, since the arts maintain beauty.'

² See Coomaraswamy, *The Dance of Life*.

son and the rest of the female species of the human race. But the sculptor who seeks to apprehend the formal laws behind particular phenomena is aiming at "truth to nature" of a more universal and permanent kind.' This was written by R. H. Wilenski, in a summary of the characteristic developments of modern sculpture on the lines indicated by the work of Gaudier. Herbert Read, writing about the relation of the sculptures of Henry Moore to nature, says: 'It is a kind of fidelity represented by archaic types of Egyptian, Greek and Etruscan sculpture, very definitely by Mexican sculpture, but perhaps with the greatest sureness by the long tradition which spread from the East and permeated the North and West known to art historians as the Animal Style. It is so called because it finds its most characteristic expression in the representation of animal forms. In such representations there is no attempt to conform with the exact but casual appearances of animals; and no desire to evolve an ideal type of animal. Rather from an intense awareness of the nature of the animal, its movements and its habits, the artist is able to select just those features which best denote its vitality, and by exaggerating these and distorting them until they cohere in some significant rhythm and shape, he produces a representation which conveys to us the very essence of the animal. The same significant vitality is developed, perhaps from the same origins, by the Romanesque and gothic sculpture of northern Europe.'

From comparison of these quotations with that from Professor Maryon, both using the criterion 'truth to nature', it is clear that that definition itself is still ambiguous. By 'truth to nature' Maryon would mean the sort of reproduction which one would expect of a mechanical duplication of a natural object, although he allows divergence from it *up to a point* and in so far as such divergence can cause him, personally, emotional satisfaction. The quotations from Read and Wilenski contain philosophical, and probably mystical, notions which are not clearly brought out. But the view which they seem to adumbrate is quite certainly opposed to that of Maryon, and seems to include, although it involves more than, imitation of the type or essence in nature rather than imitation of the individual.¹

¹ Mr. Herbert Read has been kind enough to point out to me that the passage quoted from his book on Henry Moore is merely a description of a par-

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The 'imitation' theory of beauty has only to be lucidly stated and it refutes itself. Its only speciousness resides in obscurity. (1) The naïve form of the theory, that representational realism, or the power to create illusion, is constitutive of beauty, falls to the ground of its own accord in view of the facts (a) that many art-forms admitted to be capable of beauty are not representational and do not imitate anything except themselves; and (b) that among those works of art which are imitative relative beauty is not assessed by the degree of their representational realism (witness photographs, Madame Tussaud's waxwork figures, and other forms of mechanical reproduction). Those who profess to criticize and appreciate artistic beauty by the criterion of representational realism always in fact nowadays admit that it is not an exact criterion and modify it by some other criterion such as their own emotional satisfaction or pleasure in the work of art appreciated. If it is argued that 'imitation' as a criterion of beauty must not be understood in the literal sense but in a more extended sense whereby non-representational forms of art such as music can be called imitative, we are led to the metaphysical type of imitative theory. (2) Metaphysical imitation theories maintain that beautiful art imitates a reality or an ideal or type behind the natural object and enables us to apprehend a super-natural or super-sensible reality. But if we can only know the supersensible reality through the work of art, we can neither know that any work of art imitates or reproduces

ticular style, to which Henry Moore's work approximates, and by no means represents his theory of art in general, which is actually nearer to my own. The correction is important and I imagine he would agree that the work of any artist or stylistic tradition does not stand or fall by the metaphysics inherent in it. This quality of *vitality* by the emphasis upon which he suggests that an artist may convey to us the 'very essence' of an animal is treated by Roger Fry with cautious scepticism. It seems quite certain that some artists have, overtly or implicitly, believed that the 'essence' of at any rate living organisms consists in or embraces a specific form of *vitality* and have made it their aim to reproduce that 'essence' in their works by giving to their works a characteristic vitality of their own which an exact copy would not have. It is equally certain that all beautiful works of art do not possess and have not aimed to possess that quality of vitality, which, therefore, is neither identical with beauty as such nor a universal concomitant of beauty. It would be interesting to know whether, in the view of the critics, any work of art could possess this quality of vitality in a high degree while manifesting a low degree of beauty as a work of art.

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a supersensible reality or that a more beautiful work of art reproduces a supersensible reality more perfectly than a less beautiful work of art. For in order to know that anything is an imitation of something else you must be able to know independently both that thing itself and that which it imitates. If you cannot know that which is imitated except by knowing the imitation, you cannot know that the imitation is an imitation or how exact an imitation it is. Hence, although the metaphysical imitation theory of beauty were true, we could not know it to be true.

It follows from the rejection of 'imitation' theories of beauty that we must reject also the belief that natural beauty is prior and the beauty of art secondary to it. We must reject all theories which explain the beauty of art as simply a selection and intensification of the beauties of nature.¹

¹ See Grant Allen: 'The choice of "bits" is one of the greatest tests of an artist's natural taste. Autumn and sunset are the chosen seasons of the painter as well as the poet. Reds are far more common in art than in nature, and bright colours are lavished in considerable profusion. In short, all those tints and shapes which please us elsewhere are selected and combined in Painting.' *Physiological Aesthetics*, p. 224. It is one of the greatest achievements of working artists since Cézanne to have rendered this conception of artistic purpose and excellence unambiguously ridiculous.

Chapter IV

SUBJECTIVE AND OBJECTIVE THEORIES OF BEAUTY

MOST metaphysical and crypto-metaphysical theories of beauty convince, when they convince at all, by the use of elevated verbal ambiguity or a passionate confusion of ideas, cloaking conceptual obscurity beneath spiritual exaltation. Psychological theories on the other hand prefer to parade more demurely abroad in the uniform of science, debunking the high-falutin and hiding logical ambiguities of their own behind the prestige of modern terminology. Metaphysical theories appeal because they seem to propound something wonderful and grand which is never quite clearly understood; psychological theories seem to say something so simple and clear that it must be self-evidently true. The appeal of the latter is more insidious to-day, but it would be an error to accept their ingenuousness at its face value. Modern jargon conceals as much illogicality as the bombast whose fashion is worn out.

The logical pattern of psychological theories of beauty is speciously simple. They define beauty by reference to a specific sort of mental state, non-cognitive in character, such as pleasure, delight or a particular emotion. They may do so in either of two ways, which it is important to keep distinct. To avoid verbal clumsiness we will use the word 'appreciation' to refer to the mental state in reference to which beauty is defined, however that mental state may be described in each particular form of psychological theory. It may, then, be asserted that beauty is a relational property, the property of being the object of appreciation in this or that person and not a property which anything possesses in its own right and out of relation to human beings engaged in the activity of appreciating it. In other words, the

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class of beautiful things has nothing at all in common except the fact of being appreciated and when we say that something is beautiful we mean simply that it is related to some human being in the sense of being the object of his act of appreciation. On the other hand it may be asserted that the mental act of appreciation is the means by which we detect and become aware of beauty in the objects of appreciation. If a psychological theory is held in the latter sense it is consistent with the belief that beauty is an objective, non-relational property which all beautiful things possess in their own right and by which the class of beautiful things is distinguished from all things which are not beautiful. If appreciation is held to be constitutive of beauty in the former sense, it is also a means of detecting the presence of beauty, for the act of appreciation brings the beauty into being. But in the latter sense it is not necessarily also constitutive of beauty. Nor does it necessarily follow that appreciation is cognitive in character or a form of awareness because through it we become aware of beauty; for it may be held, and has often been held, that the contemplation of beautiful things brings us a special kind of pleasure or delight which is a sign to us of their beauty, although the pleasure we experience is not itself a part of our awareness of them.

We will illustrate the logical pattern of psychological theories by the simplest type of all, the theory which defines beauty in terms of pleasure. This type of theory is summed up in the affirmation 'anything is beautiful which causes pleasure'. But this affirmation may be asserted with three distinct meanings.

1. It may be intended to assert that the sentence 'This is beautiful' *means the same as* the sentence 'This is pleasant', i.e. it may be advanced as a logical definition of beauty. In that case it would be tautological to say that all beautiful things are pleasant or to say that any particular thing is both beautiful and pleasant, because when we said that anything was beautiful our words would mean the same as if we said that it was pleasant and when we said that anything was pleasant our words would mean the same as if we said that it was beautiful.

2. The statement that anything is beautiful which causes pleasure may be intended simply as an affirmation of empirical uniformity, asserting that all things which are pleasant are also

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beautiful in the degree in which they are pleasant and that all beautiful things are also pleasant in the degree in which they are beautiful. In philosophic language, it may be intended simply as an assertion that the properties of being pleasant and of being beautiful are universal concomitants of each other. If this is meant, it would involve the consequences that pleasantness is a reliable indication of beauty and that we should be able to detect the degree of beauty inherent in anything at all by the degree of pleasure aroused by it. But this position not only does not involve, but is incompatible with, the former view that pleasantness and beauty are one and the same characteristic described by two different but interchangeable words. For when we say that two properties are concomitant and always present together we must imply that they are two and not one. In this meaning, therefore, the statement is not a definition of beauty and we may still inquire what that property beauty is of which pleasantness is a concomitant. It might indeed seem patently ridiculous to expect to find any other property common to all things which cause pleasure except simply their capacity to stimulate pleasure. But in the case of certain more complicated psychological theories of beauty it is not immediately obvious that besides the relational property in which they stand to acts of appreciation beautiful things should possess some other non-relational property in common. The assumption that they do possess such a property is most specious with theories which hold that appreciation is a special sort of mental state or emotion which is experienced always and only on those occasions which are commonly meant when we speak of the enjoyment of beauty.

3. In our everyday unphilosophic attitudes and in the ordinary language of appreciation we are accustomed to assume that there exists a class of things whose principal function is to manifest beauty (roughly identical with the class of works of art), a wider class of things which may manifest beauty incidentally (factories, utensils, human bodies, etc.) and a much wider class of things which are normally neutral in respect of beauty or which at any rate are not normally subjects of beauty judgments. We do not naturally speak of everything which we find pleasant as beautiful and anyone who did so would be judged to be distorting the language. A man who spoke of the act of defecation as

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beautiful because he found it pleasant would be regarded with amazement. Writers who profess to define beauty in terms of pleasure are not as a rule prepared to flout ordinary linguistic convention to this extent either. When they say 'anything is beautiful which causes pleasure' they in fact mean 'all beautiful things are pleasant' but not 'all pleasant things are beautiful'. If pressed, they would be compelled to admit that some pleasant things are neutral in respect of beauty or that there are some pleasant things to which aesthetic predicates are not properly applicable. The class of pleasant things is wider than the class of beautiful things. When the statement 'anything is beautiful which causes pleasure' is whittled down to 'everything which is beautiful is pleasant but not everything which is pleasant is beautiful', it is not only incompatible with the first meaning assigned to it but becomes completely nugatory and trivial. It not only does not give us a definition of beauty; it does not even provide a reliable criterion for detecting the presence of beauty. For if some things which cause pleasure are beautiful and some are not, we cannot know from the fact of pleasure alone whether anything which causes pleasure is beautiful or not.

Most psychological theories of aesthetics seem specious only by confusing a definition which they apply in the third sense with one which they affirm in the first or second sense. Sometimes an attempt is made to save the position by arguing that what is meant is that anything is beautiful the mere contemplation of which is pleasant—thus a beetle may arouse loathing and repugnance, but if we contemplate it objectively and impassively, its contemplation may give pleasure and then it is said to be beautiful. But many things cause pleasure in being contemplated and for many reasons. Some people derive pleasure from the contemplation of ecclesiastical statuary because they are aroused to thoughts of God; some people derive pleasure from the contemplation of others' pain because their temperament is sadistic. And by the time 'mere contemplation' has been defined closely enough, we have passed to another type of theory.

The only sort of psychological theory of beauty which can escape these logical fallacies without destroying the basis for an autonomous science of aesthetics is the type which defines appreciation as a special and peculiar kind of mental activity

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which occurs only and always in the experiences which we are prepared to recognize as enjoyment of beauty and which defines beauty in terms of this special kind of mental activity. If a unique kind of mental activity is postulated in the appreciation of beauty, it must be verifiable empirically by introspection. A psychological theory which postulates a simple emotion or a complex mental structure unique to the appreciation of beauty but unverifiable by introspective experience carries us no further than a metaphysical theory which alleges to define beauty by its functional relation to ultimate reality without telling us what beauty is in experience or by what means it is to be detected. There have been several psychological theories of this sort, which we shall now examine. They have all maintained that the psychological activity of appreciating beauty is in some way different from other forms of psychological activity and that its difference is a difference of a psychical character and does not consist merely in the class of objects to which it is directed. Hitherto they all break down through their inability to prove that the appreciation of beauty is in fact psychologically unique. They either seek the distinguishing feature of aesthetic appreciation in some emotional experience which they are unable to show is unique to appreciation or they describe appreciation as a special and complicated combination of mental processes which is not introspectible and seems fictitious. Mr. Clive Bell and his followers appear often to exemplify the former and the most prominently noised instance of the latter is the theory of 'synaesthesia' put forward by C. K. Ogden and I. A. Richards.

A psychological theory of this sort may define beauty in terms of a unique mental state which it calls appreciation, and may assert that whenever we say something is beautiful we *mean* that it is actually or potentially the object of appreciation. Or again it may be combined with a belief that all objects of the unique mental state called appreciation have certain common structural properties peculiar to them and not possessed by any other objects of experience. In the latter case the properties of being an object of aesthetic appreciation and possessing a special type of structural property are universal concomitants of each other. The distinction is important, since the latter but not the former sort of theory allows the existence of an objective beauty

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property. The former would lead to a true 'relational-subjective' type of theory—Type 4 in our classification; the latter would belong to Type 5. With theories of the latter type, which hold that the appreciation of works of art involves unique mental features *and* that the objects of appreciation possess a common non-relational structural property not possessed by other things, it is unimportant whether the word 'beauty' be applied to the objective property which makes some things capable of being the objects of appreciation or to the relation which arises when they are appreciated. The former is more in keeping with customary usage and therefore to be preferred.

Mr. T. S. Eliot once wrote: 'The effect of a work of art on a person who enjoys it is an experience different in kind from any experience not of art.' The view that the unique character of the appreciation of beauty resides in a special kind of *emotion* which is not experienced except in the appreciation of beauty made considerable headway some years ago. A popular exposition of this doctrine by Vernon Lee used once to be read by all students of the arts and aesthetics.¹ Mr. Clive Bell has also maintained it from time to time. 'I still believe', he says, 'that there is a unique aesthetic emotion which is the essence and beginning of all aesthetic pleasure.' And again: 'The chief respect in which one picture differs from another is, of course, in power of provoking the grand aesthetic thrill.'² Clive Bell did not accept that beauty is to be *defined* as 'the capacity to stimulate the unique aesthetic emotion'. He believed that all things which have the capacity to stimulate aesthetic emotion (i.e. all works of art which have the characteristic excellence of works of art), and only these things, have this capacity in virtue of a common and peculiar quality which is non-relational. This quality he called 'significant form' and its elucidation he regarded as the central problem of aesthetics. The experience of the unique aesthetic emotion in appreciation is, he held, both an adequate and our only indication of the presence in the appreciated object of the non-relational property which he called 'significant form'.³ Roger Fry took a similar line in his later writings.⁴

This view is logically coherent and gives prominence to the

¹ *The Beautiful* (1913).

² *Enjoying Pictures* (1934).

³ The argument is to be found in *Art* (1920). ⁴ e.g. *Vision and Design* (1924).

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two fundamental necessities of any fruitful science of aesthetics, the existence of a unique kind of mental activity which is appreciation of the beautiful and as its proper object a non-relational property in things of beauty. Whether or not the theory is true, can be decided only empirically and in the first place by an appeal to introspection. In the half-century since the existence of a unique aesthetic emotion was first advocated it has found very widespread acceptance from aesthetic writers and art critics of very various schools, who presumably thought that they had introspective experience of a unique emotion in their own appreciations of artistic beauty. It has been vigorously repudiated by many others, who claimed to have no awareness of a unique emotion in their own experiences of appreciation. In particular, it has been ridiculed by C. K. Ogden and I. A. Richards as 'the phantom aesthetic state'. In this case the only and the ultimate appeal is to introspection and when presumably qualified observers differ fundamentally about their introspective experience, it is impossible to get further by theoretical argument. But the inadequacy of language to describe any but the most elementary emotions renders it almost impossible to compare the emotional experiences of persons who are not already in such close emotional sympathy that understanding is instinctive and this is a stern barrier to progress when we base aesthetics upon types of emotional response to things of beauty. A difficulty which has not, I think, been previously mentioned is that of comparing the emotional nature of the delight experienced by one man in the contemplation of a mantelpiece ornament which Mr. Clive Bell would regard as tasteless and vulgar with the delight which Mr. Clive Bell might experience during contemplation of a kilim. There are some professional psychologists who do not claim that their aesthetic capacities are highly developed and who have claimed to experience an aesthetic thrill from the contemplation of works which Clive Bell or Roger Fry would regard as inferior and incapable of arousing aesthetic emotion. But it is virtually impossible to arrive at any comparison in respect of intrinsic quality between the 'thrill' of which the musically untrained psychologist seems to be introspectively aware while hearing 'Finlandia' and the 'grand aesthetic thrill' which Mr. Clive Bell claims to know introspectively

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in the appreciation of great works of art or the emotion which a musician might experience from listening to the Second Symphony. So long as emotion is taken to be the criterion of beauty, whether or not it is also held to be constitutive of beauty, there is no way of differentiating the judgments of those who are sensitive to beauty from the judgments of the obtuse. An emotion is what it is, simply a fact of experience. It may be morally good or bad in certain contexts; it may be pleasant or painful; it cannot be true or false.

It is of course impossible to prove that there is no unique emotional state which exists only in the appreciation of beauty, for no man can experience another man's emotions. But as in fact very many men of undoubted capacity to appreciate beauty have denied it, while some few have asserted it, it may be possible to suggest how in the latter case an error may have arisen. There is, I think, a special sort of pleasure or emotion, associated with heightened vitality and successful concentration, which is apt to accompany the unimpeded and intense activation of any skilled faculty, whether it be a bodily function exercised in athletics, a trained gift of craftsmanship, reasoning in logic or mathematics, or the aesthetic faculty (whatever that faculty may be) in aesthetic appreciation. As there are times when we seem to be more alive than others, when we are pervaded by a general sense of pleasant well-being, so at times a particular faculty may be more 'alive', more intensely engaged, than ordinarily and the concomitant pleasure is more intense and more specific. However it is described or explained, the experience is very widely recognized. But it is not peculiar to aesthetic appreciation. It may be experienced by Mr. Clive Bell in the contemplation of beauty, by Russell in the process of mathematical discovery, by a skilled craftsman in the exercise of his craft, by Goossens in perfect execution on the oboe or by an athlete in smooth bodily co-ordination. Those aestheticians who have based their definitions of beauty upon this emotion have, I suggest, overlooked the fact that an emotion which they themselves know only in the contemplation of beauty is experienced by other men in the exercise of another faculty. It is impossible to prove this, but very difficult to doubt it. When the so-called 'aesthetic emotion' is understood in this way it explains too why some people, and even

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people of great competence in other walks of life, often seem to obtain an aesthetic thrill from blatantly bad works of art. For in a person whose aesthetic faculty is little developed or blunted from disuse a cruder type of stimulus may be necessary and sufficient for its partial and imperfect activation and the very unusualness of the experience may cause noticeable pleasure. It points also in the direction of what we shall argue to be the true nature of aesthetic appreciation, that is the heightening and intensifying of the faculty of perception (or imaging) when it is exercised for its own sake and not, as usually, in the service of practical ends.

The view that there exists a unique kind of aesthetic emotion could be maintained without maintaining that those things which have the power to stimulate this emotion have a common and peculiar non-relational property as well. But the addition is important. It is repudiated by Ogden and Richards (in *The Foundations of Aesthetics* and in *The Meaning of Meaning*) and by Richards (in *The Principles of Literary Criticism*) as due to a linguistic fallacy analogous to the fallacy involved if we think we are referring to a common objective property when we call all things which tend to cause death 'lethal', all things which cause pleasure 'pleasant' or all things which cause pain 'painful'. So, it is said, if we suppose that because we call 'beautiful' all things which cause the aesthetic experience they have some common objective property 'beauty', we are misled by linguistic analogy. The argument is slick but unsound. The fact that we use such adjectives as 'painful' and 'beautiful' does not guarantee that all painful things have anything in common except the capacity to cause pain or that all beautiful things have anything in common except the capacity to be appreciated. And to point this out would be sufficient refutation of anyone who based his belief in an objective, non-relational property of beauty on the sole fact that we call beautiful things beautiful. But of course no one has ever believed in the existence of objective beauty solely on these linguistic grounds and the argument refutes no one.

Nor is it honest criticism to jump from the true statement that 'significant form' is a name and not a description to the statement that the property to which the name calls attention is fictitious. All that was claimed for 'significant form' was that it indicated

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a non-relational characteristic which should be made the object of aesthetic research.

To deny that there can be any objective beauty-characteristic under any name, because most emotional stimulants have nothing else in common except the property of stimulating emotion, is to push analogy to illogicality. The inference that works of art have a single common and unique quality does not follow with logical necessity from the premise that appreciation of a work of art is different in kind from any experience of anything which is not a work of art. But though not logically cogent, the inference is eminently reasonable as a hypothesis to be examined. For the artistic experience is not a casual and abnormal thing; it is eminently normal, persistent, pervasive and most important in its influences upon other spheres of human life and experience. If, then, we assert both that this experience has a unique quality and that the proper objects to which it is directed have no common quality apart from their common relation to this unique human experience, we are introducing an element of irrationality and casualness into a very important department of reality. The general aim and purpose of philosophy is to understand human experience and the objects of experience. It therefore posits rationality and coherence everywhere, and then proceeds to look for the rationality it has assumed. If and so long as any department of experience and actuality is not found to be rational it is unamenable to philosophical treatment. The philosopher therefore accepts a reasonable inference as a hypothesis for examination though it may not be logically cogent; he rejects it only if, after examination, it is not found to be amenable to reason.

You must either hold that the 'unique' aesthetic experience is directed towards objects which have a common non-relational quality, or you must suppose that its occurrence is fortuitous and dependent upon nothing in the nature of the things to which it is directed. The former supposition is not necessary but is a reasonable hypothesis for scientific investigation. If the latter were true it would be much more difficult to explain the measure of conformity that there is in genuine aesthetic judgments than it is to explain their discrepancies if the former is true. In fact the probability that beautiful things have a common non-relational

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characteristic is greater than the probability of finding the unique character of appreciation in an emotion. Emotions are not unique. They are vague in outline and run into each other. Their causes in general depend upon the relation of the stimulus to the experient. We do find on the other hand that the causes of specific sensations have common physical properties and in the sequel we shall suggest that aesthetic contemplation is characterized as a special kind of perceptive attitude rather than as a special emotion.¹

Ogden and Richards themselves propose a unique aesthetic attitude which, they claim, 'marks off a field which cannot otherwise be defined and also explains why the objects therein contained can reasonably be regarded as of great importance'.² This unique attitude of mind they call 'synaesthesia'. It has frequently been misunderstood,³ but has been described by them as follows: 'Limiting ourselves for the moment to the visual field we are aware of certain shapes and colours. These when more closely studied usually reveal themselves as in three dimensions, or as artists say, in forms. These forms must in some cases, but in others may not, be identified as this or that physical object. Throughout this process impulses are aroused and sustained, which gradually increase in variety and degree of systematization. To these systems in their early stages will correspond the emotions such as joy, horror, melancholy, anger, and mirth; or attitudes, such as love, veneration, sentimentality. . . . So far, however, we need not have experienced Beauty, but it is here that our emotion assumes a more general character, and we find that correspondingly our attitude has become impersonal. The explanation of this change is of the greatest importance. The various impulses before alluded to have become further systematized and intensified. Not all impulses, it is plain, as usually excited, are naturally harmonious, for conflict is possible and common. A complete systematization must take the form of such an adjustment as will preserve free play to every impulse, with entire avoidance of frustration. In any equilibrium of this kind, however momentary, we are experiencing beauty.' The authors

¹ Chapter 6.

² The quotations are taken from *The Foundations of Aesthetics*, Chapter XIV.

³ e.g. Christopher Caudwell, *Further Studies in a Dying Culture*, pp. 79-80.

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call attention to the main characteristics of the aesthetic attitude of mind which have most frequently been noticed by other writers—the lack of any tendency to action, its detachment, disinterestedness and impersonality. They claim that these characteristics result from equipoise among the impulses stimulated and that as equipoise becomes more perfect among a greater number of impulses, so ‘we become more fully ourselves’.

There is little than can be said about this theory except that it is a psychological fiction invented for the occasion. The authors expect that the experience they describe ‘will be recognized by those who look for it, it has, indeed, been noticed by many poets and critics’. Certainly, the detachment, impersonality, etc., of the aesthetic attitude have often been noticed. Equally certainly the presence of a large number of emotions and impulses balanced in equipoise among themselves like a donkey surrounded by a ring of equidistant carrots, has never been noticed by anyone in aesthetic contemplation, nor ever can be.¹ When you contemplate a picture or enjoy a musical composition you may be aware of a rather vaguely defined emotional colouring—melancholy, light-heartedness, elevation—which in the case of music may change as the piece progresses. You are not aware of specific emotions, nor of impulses. No one has ever become aware of an experience of anger, jealousy, repentance while maintaining uninterrupted aesthetic appreciation. Still less has anyone ever become aware of an equipoise among emotions and impulses in aesthetic appreciation. Such speciousness as this theory possesses comes from the literary arts, in which the description or suggestion of human emotions may be part of the material with which the artist creates, and it is a theory which could only have been evolved by persons accustomed primarily to the appreciation of literary art who have confused the nature of appreciation with its content. The passiveness and detachment of appreciation are not due to an equipoise among conflicting emotions in ourselves

¹ In a contribution to the symposium, *The Intent of the Critic* (Princeton University Press, 1941), John Crowe Ransom dismisses the theory in the following words: ‘When Richards bewilders us by reporting affective and motor disturbances that are too tiny for definition, and other critics by reporting disturbances that are too massive and gross, we cannot fail to grow suspicious of this whole way of insight as incompetent.’

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but to the objective awareness of emotions which are not ours but are presented to us imaginally instead of being experienced.

As has been said, a psychological theory can be judged only by reference to experience and fact. The experience by which psychology is judged must be provided by introspection. A psychological theory not verifiable by introspection is a psychological fiction. The theory of *synaesthesia* is one of the most blatant examples of modern scientific mystagogy. It is specious only if you confuse awareness of a situation containing emotions and impulses with direct experience of emotions and impulses in oneself.

Ogden and Richards believe that beauty is a relational property and that when we say something is beautiful we *mean* that it is the object of synaesthesia. It would be possible to hold that synaesthesia is an *indication* of beauty and that all objects of synaesthesia have a common non-relational property in virtue of which they, and they alone, are capable of arousing synaesthesia. This view they reject on the ground that those things which stimulate human emotions and impulses have in general nothing in common except their relation to human beings as stimulants. Yet they appear to believe that synaesthesia marks off a field of things which corresponds closely with the things which careful and sensitive persons judge to be beautiful; they appear to believe that there is *one* class of beautiful things for *all* suitably conditioned persons, and yet these things have nothing else in common with each other except their capacity to stimulate a complicated and unique reaction in all suitably conditioned persons. Now this is very curious. We know that different things stimulate the same emotions and impulses, and the same things stimulate different emotions and impulses, in persons belonging to *different countries, races and ages, or even for the same persons at different times*. Yet we are asked to accept that one and the same unique complex of impulses and emotions is aroused in all suitably conditioned persons by the same things, while these things have nothing else in common with each other. We are even forbidden to investigate the possibility that these things have any common property among themselves because to do so would be illogical. This is to introduce a strange irrationality, which can only result from unrealized prejudice. For the tendency of any

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unbiased investigation is to assume that experience is rational until it has been proved irrational.

The subject-matter of aesthetics is a very ancient, widespread and persistent human activity. In the individual it may stultify all other interests or it may hold its own alongside the most compelling aspirations which human nature knows. It is second only to religion in its power to attract devotion to itself and invoke sacrifice of material and physical comforts to its furtherance. It can dominate the life of a man and has dominated the lives of many men who are generally recognized to be among the outstanding personalities of the world. Absorption by the aesthetic interest is consonant with that human quality of personality which we call greatness. When we consider the permanence, the ubiquity and the intensity of this interest we are inclined to suspect that if the philosopher of aesthetics can do no more than offer us a disquisition upon linguistic usage, or an admission that pleasures vary with emotional training and temperament, then the fault lies in the philosophy and not in the poverty of the field of its inquiry.

The subjective theory of beauty is very widely professed to-day by thinking men and by practising artists and critics, though usually accompanied by a tendency to claim preference for their own aesthetic judgments. It is the popular and fashionable view of the moment. Most recent writings in aesthetics and criticism which have reached a wide public have been obsessed by the importance of emotional response to works of art—a heritage of the Romantic Age—and are therefore naturally subjective in tendency. And the breakdown of an established if narrow line of artistic development by the sudden revelation of the artistic heritage from peoples and ages widely separated from us has tended to a chaotic diversity of taste and appreciation, to which a subjective theory of beauty seems to some people the proper intellectual counterpart and to others a cry of despair.

The matter is important because if we accept a subjective theory we are bound to recognize that there is no science or philosophy of aesthetics other than the history of taste and the psychology of emotions.

We maintain then that the postulate of unique psychological features in artistic appreciation does not involve the existence or

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absence of an objective non-relational beauty property but it does involve that objective beauty is a reasonable hypothesis to be investigated. Modern philosophic thought in general tends to adopt an agnostic attitude towards the objective theory of beauty on the ground of the great diversity among actual beauty judgments and the difficulty of finding any measure of agreement among factual appreciations of beauty. In my view it is no different to say that beauty is an objective property but we cannot know it and to say we cannot know whether beauty is objective. It is necessary, therefore, to examine a little more fully the logical implications of non-relational theories of beauty (Type 3) and the alleged diversity of beauty judgments.

In the history of the philosophy of aesthetics the antithesis 'subjective' and 'objective' has borne several senses. The beauty of objects which can be apprehended through the senses has been called 'subjective' because it was thought to be an image or symbol of the ultimate Beauty of real essences, the invisible world, or God, which alone was deemed worthy to be called 'objective'. Or beauty has been called 'subjective' because it was thought to be a property of things apprehended by feeling or sentiment, in contrast with 'objective' truths of the reason. These uses of the words and others which, like them, envisage metaphysical doctrines of reality do not enter into our purview at present. Any theory of beauty we shall call 'subjective' which maintains that all propositions which assert beauty assert a *relation* between the object said to be beautiful and some person or group of persons affected by it. We shall call any theory of beauty objective which maintains that all propositions which assert beauty ascribe to the beautiful object itself some quality independent of its effect upon human beings.

There is a third type of theory ranging between these two types. According to it when we assert that anything is beautiful we assert that it has certain characteristic effects upon the feelings of emotions of competent observers but hold that the feelings or emotions affected are universal to human nature as such and hence the effects do not, ideally, vary from person to person. Empirical variations, which are manifested in actual discrepancies of taste and judgment, are explained as the results and signs of imperfect capacity to appreciate or imperfections of feeling

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and sentiment. Theories of this sort are 'objective' in that they maintain that anything is or is not beautiful irrespective of individual response to it; they are 'subjective' in that they maintain that beauty consists in an ideal type of emotional response to the beautiful thing.

As a class these theories are liable to the same logical objections as psychological theories in general, with the addition that the idea of a 'typical' or 'ideal' type of response is very confused in itself. In actuality men differ vastly in their emotional reactions and I do not believe that the notion of an 'ideal' human response in aesthetic situations can be made sensible except in terms of moral valuations. If, indeed, it is held that beauty is an objective characteristic and that the appreciation of beauty is a mental act *sui generis*, some sort of 'ideal' theory could be defended in the sense that it is 'ideal' or 'typical'—though not necessarily usual—for human beings to experience appreciation when confronted by a beautiful object just as it is 'typical' to experience a sensation of yellowness when confronted by a dandelion. Except upon these assumptions the theory has nothing to recommend it.

We will now examine a little more fully the logical implications of subjective and objective theories of beauty respectively.

If I and a companion are looking at a dandelion and I say 'That dandelion is pink', while he says that it is blue, our statements are contradictory (mutually exclusive); if my statement is true his is false and if his is true mine must be false. They may both be false but they cannot both be true about the same dandelion. But if I say that the colour of the dandelion is stimulating and he says that it is depressing, although we are apparently making conflicting statements they may both be true. The dandelion's colour may be stimulating to me and depressing to my companion. Our statements are verbally conflicting but not logically contradictory.

The two sets of statements are of the same grammatical form but logically diverse. The first pair affirmed the existence of an objective quality (a specific colour) in the dandelion, and as (we presume) no dandelion can be two different colours at once the conflicting statements were contradictory, the truth of either excluding the truth of the other. But although the second pair of

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statements seemed grammatically to be affirming the existence of mutually exclusive qualities in the dandelion's colour, they did not in fact do this because the qualities in question are *relational* and the dandelion possesses them only in relation to some person. The affirmation of relational qualities is strictly meaningless unless you supply a term to the relation. 'This book is dull' is a meaningless statement unless you read into it a term to the expressed relation, viz. 'This book is dull *to me*' or 'This book is dull *to most educated men*'. Since any one thing may stand in contrasting relations to various other things at any one time—a book may enthrall one man while it arouses acute irritation in another and sends a third to sleep; the colour of a dandelion may stimulate one man to poetic frenzy and depress another—relational propositions are not contradictory (mutually exclusive) unless the term of the relation is the same.

Aesthetic judgments are reducible in their simplest form to the proposition-type 'This thing is beautiful' or 'This is a beautiful thing'. We are concerned with the question of fundamental importance for the development of aesthetics, whether propositions of this sort belong to the class of propositions which assert an objective quality, like 'this dandelion is blue', and are contradictory when they are conflicting, or whether they belong to the class of relational propositions and may be conflicting without being contradictory, like 'this colour is pleasant', until the term of the relation has been specified. When I say 'This picture is beautiful' and my companion denies that it is beautiful may we both be right or does the truth of either statement exclude the truth of the other? It is admitted that works of art evoke different and often opposite emotional experiences in different people and the question at issue is whether the whole content of significant aesthetic judgments always and necessarily refers to these experiences.

It follows from the logical structure of any subjective theory of beauty that whenever we make any judgment about beauty we mean, or should mean, that the thing about which we are judging stands in a special relation to some person or group of persons. Although grammatically aesthetic judgments seem to affirm the existence of an intrinsic quality in things judged to be beautiful, and the sentence 'that picture is beautiful' has the

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same grammatical form as the sentence 'that frame is green', yet *in fact* all judgments of the form 'that picture is beautiful' contain a suppressed reference to the emotions of human observers, and may be analysed into the form 'all suitably conditioned human beings who observe that picture under favourable conditions will experience a specific sort of emotion towards it'. Aesthetic judgments are then statements of empirical fact involving generalizations about human emotional characteristics.

The objective class of theories, which maintain that aesthetic propositions conform to the type 'this frame is green', can be described by the following consequences: (1) When I say that anything is beautiful I do not mean that it stands in any relation to anything else. (Of course I may believe, and believe correctly, that such a relation exists, but the affirmation of its existence is not part of the content of meaning asserted in my judgments about its beauty.) (2) If I say that something is beautiful and someone else says that it is not beautiful, one of us must be mistaken. It is often considered that the large measure of discrepancy which exists among the practical judgments men make about the beauty of particular things is for this reason sufficient in itself to rule out of court objective theories of beauty and we are therefore obliged before going further to examine this contention more closely.

If several philosophers have adopted different definitions of beauty, they are henceforward debarred from arguing about concrete estimations of beauty. If they disagree about their ascriptions of beauty to particular things, this is only to be expected since they are ascribing different properties when they talk about beauty. There can be no argument between them except about the proprieties of linguistic convention. So the practical beauty judgments of appreciation, which provide the data of aesthetics, disagree only in so far as they presuppose the same notion of beauty. If one practical art critic understands when he says something is beautiful that it is a good realistic imitation, another that it tends to cause moral uplift, another that it is a good technical exploitation of a medium and another that it satisfies him emotionally, their judgments about the respective beauty of particular things *cannot* conflict. In particular, *all judgments presupposing a non-objective notion of beauty are irrele-*

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vant to an objective theory of beauty. They cannot support it but they cannot be used in evidence against it and the apparent or real conflicts among those who judge beauty by non-objective theories give no logical support for the rejection of an objective theory of beauty. The only conflicts among particular ascriptions of beauty which would render difficult an objective theory are those among judgments all of which seem to be about objective beauty and ultimately about objective beauty conceived in the same way.

Differences in beauty judgment which are *irrelevant* may be reduced to the following types:

1. Differences between the judgments of persons who understand different sorts of things by beauty, as:

technically clever

a realistic imitation

possessing a specific objective structure or form

arousing pleasant associations

a good moral influence (particularly in respect of 'theme')

emotionally satisfactory

containing a large number of individually pleasant colours or sounds

2. Differences between the judgments of persons who hold the same psychological theory of beauty, but experience different emotional reactions to the same object. As one man likes olives and another dislikes them, so one man enjoys 'In a Monastery Garden' and another dislikes it.

3. Differences between persons who define beauty in terms of different sorts of emotional response. It is never, I think, maintained that beauty is constituted by the capacity to arouse repugnance or boredom. But while most people think that beauty is constituted by emotional reactions of serene and calm enjoyment, some people (and among them most artists) hold that the things which have great beauty are those which arouse disturbing and vigorous emotions, or stimulating and sublime emotions.

In going round the exhibitions you will frequently hear judgment passed on a picture in the words: 'But I could not live with it,' and the answer: 'Could you "live with" the later Beethoven quartets?' The one person is assessing the picture as a wallpaper and the other as a work of art. But if a person means by beauty

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the power to titillate mildly pleasant emotions, as a wallpaper or restaurant music, without distracting attention, he will find beauty elsewhere than a person who expects more robust emotional stimulation.

4. A more subtle source of difference has an important bearing on practical matters of taste. Emotions may be distinguished as primary and associative, although it is often difficult to discriminate completely between them in any concrete emotional experience. Any work of art arouses directly certain emotions in a sensitive observer. These are the primary emotions and are the basis or origin of all emotional response to works of art. But the fact that works of a certain sort have frequently aroused in some person primary emotions of a certain sort tends to induce emotions of this sort, by association from previous experiences, to be more easily aroused in him in the future by works of the same sort or by works superficially resembling these. It may also tend to inhibit emotions of the same sort from being easily experienced towards works which are superficially very different from them. A person who in adolescence experienced strong and pleasurable emotions towards Gothic architecture and painting of the Italian renaissance, and especially if he approved of himself for so doing, may in later life easily experience emotions towards works of this class and tend to find unpleasant Byzantine painting, Mexican sculpture, Surrealist painting, and anything superficially very different from the enthusiasms of his adolescence.

The process is cumulative, and the ease, increasing with practice, with which pleasant emotions are experienced towards a certain class of works may tend to induce laziness of observation even towards works in that class. In course of time the associative emotions may almost or quite oust the primary emotions. A person in whom this has happened will be apt to experience pleasurable emotions towards a 'poor' work of the type which he admires, a work which would not have aroused in him pleasurable emotions at a time when primary emotions played a more important part in his total emotional response to works of art. And he will be inhibited from experiencing pleasurable emotions towards a work superficially very different from those of his favoured type, even although at an earlier date he might

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have experienced pleasurable primary emotions towards it. Such a person is said to have lost the power of discrimination. The vogue for derivative and second-rate Academicism depends upon such general atrophy of primary emotional response, particularly common in intellectualist communities such as universities.

Many differences among the judgments of persons not unused to looking at pictures or listening to music are mainly expressions of the personal history of their emotional associations.

5. Many—perhaps most—actual beauty judgments of the subjective type carry an implicit reference to an imaginary class of 'competent observers'. When a person says that anything is beautiful he means that he experiences a certain emotion towards it (and therefore it is beautiful for him) *and* that all competent observers experience a similar emotion towards it (and therefore it is beautiful to all competent observers).

In so far as the aesthetic judgment refers to the emotions of the person who makes the judgment it is both impudent and silly to question the judgments of any other person. It is impudent because each person is ultimately the most competent judge of his own emotions. With honesty and care it is perhaps unnecessary to make serious mistakes about one's own emotional dispositions towards works of art. If such mistakes are made, they are analogous to autobiographical blunders and placard their author as an unreliable source of *data* for the aesthetician. It is silly because if beauty has been defined to mean a relation to the emotional states of an observer, since it is obvious that any one object will stand in different relations to the emotions of different observers, it is also obvious that any object will have different, beauty-characteristics for different observers. The introduction of a reference to the emotions of a class of observers (those who are competent in matters of appreciation) seems to give greater scope for error and controversy. To be mistaken about the emotional dispositions of a wide and not very clearly defined class of people, including many who are dead and perhaps many who are not yet born, presents very little difficulty at all to anyone but a superman. The sort of controversy which usually arises is, however, illegitimate. People argue about the class of observers which should be accepted as competent. One man says

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that all sensitive and unprejudiced observers will find a Brancusi carving or a Gabun head beautiful. Another is confident that all men with natural and undistorted aesthetic impulses will be revolted by the jungles of Ernst, bored by the bronzes of Benin, and moved to mock the hollowed sculptures of Zadkine. The controversy which will arise between them will concern their failure to agree which of the two classes assumed to be competent is correctly assumed to be so, which of the two classes experiences the *correct* emotional response. This controversy is illegitimate to the subjective theory. According to that theory each object is beautiful to the class of people who find it attractive and non-beautiful to the class of people who do not find it attractive. There is no possible ground for discriminating in point of correctness or appropriateness between the two classes. Whether the notion of a class is implied in the aesthetic judgment or not, the subjective theory is finally and inescapably individualistic.

The reference to a class is made for two reasons. The first is that in aesthetics, as in politics, morals and warfare, most people are comforted by the feeling that they have a crowd to support them.¹ The second reason is that most people who overtly profess a subjective theory of beauty do not really believe it in the sense of being able to accept its full implications. It is not an easy matter to rank equally the aesthetic preferences of the Philistine, who 'likes a bit of colour', the sentimentalist who enjoys collecting poor water-colours of his favourite holiday resort, and a person of discriminating and sensitive artistic taste. With this difficulty we are in sympathy. But it cannot be too emphatically asseverated that the difficulty is an objection to the subjective theory of beauty, and has all the greater force for being an unconscious objection in the minds of most of those who profess that theory. There are only two grounds on which such discrimination could be made. The one is on the ground that the emotions of the sensitive and cultivated observer are more correct, and the other that they are more valuable, than the emo-

¹ 'At bottom, behind the feverish research—so common among adolescents—for a standard of beauty, there lies the fear of not being what one may call "normally superior", that is to say, at once original and in agreement with the chosen few—the most painful combination possible of pride and the instinct of the herd.'

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tions of the tasteless or the Philistine. The first involves abandonment of the subjective theory of beauty and the other involves an appeal to an extra-aesthetic theory of ethical value.

It has been maintained that there are objective or over-individual standards of Taste which act as norms for the variation of taste in individuals. This objective Taste is the crystallization of the accumulated emotional experiences of the most sensitive and cultivated students and lovers of art through the ages, the heritage of artistic tradition which is ever developing and reformulating itself according to a coherent principle of spiritual growth. When we speak of cultivating or educating individual taste we mean, among other things, that our emotional responses are being enriched and our sensibility enhanced by association with this artistic heritage of embodied and recorded emotion. The facts are probably true, though they could more profitably be described in other language. But the subjective theory is inadequate to explain them. According to that theory we should necessarily regard the people who have been responsible for building up and amplifying this heritage of over-individual and normative Taste as simply one class, and that not a large one, among others. And a subjective theory of beauty leaves no ground for preferring the over-individual standards of Taste which are concentered from the emotional responses of a minority class. We must recognize the *existence* of over-individual traditions of Taste but we can only regard them as *normative* if we either abandon the subjective theory of aesthetics or introduce moral standards for assessing human reactions to aesthetic objects.

One of the main factors inducing philosophers and others to assume a subjective theory of beauty on insufficient evidence was, we said, chaotic diversity of aesthetic judgments.

The apparent chaos of aesthetic judgments is reduced by distinguishing obviously subjective judgments from those which purport to be objective and apparently are so. A very great majority of the judgments called aesthetic are obviously subjective and merely express the likes and dislikes of the author of the judgment or of the class of people to which he believes himself to belong; others are subjective, though less obviously so. The differences among these sorts of judgments are natural and ex-

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plainable and therefore not chaotic. There can be no reasonable doubt that a very large majority indeed of what generally pass as aesthetic judgments are frankly and purely subjective. They are, often admittedly, expressions of private emotional response, of personal liking or dislike. The layman 'knows nothing about art but knows what he likes'. The critic knows all about art and when called upon to make an aesthetic judgment details his own emotions. Discrepancy among such judgments is natural, inevitable and to be expected. It must persist so long as men differ in emotional disposition and conditioning and in their associative training. To endeavour to reduce to order these discrepancies would be a task foredoomed to failure. The question before the philosopher of aesthetics is whether all aesthetic judgments are of this sort, frankly subjective, or whether there are some aesthetic judgments which purport to be objective. Or, as most actual judgments are complex and confused, it is his business to distinguish the frankly subjective from the apparently objective elements in these judgments.

The philosophical student of aesthetics is concerned only with judgments which purport to be objective. It is not his business to show that all so-called aesthetic judgments are objective—clearly they are not—but to investigate whether any aesthetic judgments are objective. And if any aesthetic judgments are found to be objective, then all those which are frankly subjective become irrelevant to his inquiry. To argue that because most so-called aesthetic judgments are obviously subjective therefore all aesthetic judgments must be subjective would be puerile. By admitting that a very large majority of so-called aesthetic judgments are frankly subjective we assert their irrelevance and limit our inquiry to the small class which purport to be objective. Discrepancies among obviously subjective judgments and discrepancies between obviously subjective judgments and judgments which purport to be objective are in the same way irrelevant and would not constitute a difficulty to the formulation of an objective science of beauty.

Subjective emotional reactions often enter into a total appreciative response which contains objective elements; often they constitute the whole response and are mistakenly thought to be aesthetic. They are largely unconscious and play an enormous

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part in the judgments even of the sophisticated. To introduce a polemic against them would be foolishness. Accidental individual differences must always exist and are the spice of life. There will always be more stable emotional attitudes too, which have a temporary semblance of objectivity. But it is most necessary for scientific aesthetics and sound criticism to distinguish them rigorously from true aesthetic judgments. If there are objective judgments—that is, if there is an objective quality beauty—then all these judgments are irrelevant and the discrepancies which result from them are irrelevant. The apparent chaos of aesthetic judgments is thus immensely reduced by the elimination of the subjective elements in our response to works of art.

The question we must now try to decide is whether there are indeed *any* genuine objective aesthetic judgments, or objective elements in beauty judgments, or whether—as the subjectivists assert—all semblance of objectivity is spurious.

People who are accustomed to move in artistic circles frequently hear judgments of the following general form: 'This work of art has beauty but for such and such reasons it does not appeal to me personally.' Such judgments profess to distinguish between objective beauty and individual liking or emotional response. And in general those who are most familiar with the creation or the appreciation of beautiful things are apt to recognize that their own personal preferences are selective within the field marked out by their objective estimation of beauty. Those who appreciate literature, except perhaps the professional critic, seldom confuse the works which they personally read with the most enjoyment with the works which they estimate, on their own judgment and not on the authority of critical tradition, to be the greatest literary achievements.

In addition to objective judgments passed in contrast to personal taste there are many more objective judgments made without that contrast. And objective judgments very often occur as an element in complex judgments which also contain subjective elements.

It has been seen that conflicts among subjective judgments and conflicts between subjective judgments and objective judgments are logically irrelevant to an objective theory of beauty and give no reason for doubting the existence of an objective beauty property. If, however, objective judgments were found to be

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chaotic among themselves, that is to be discrepant without explainable reason for discrepancy, the case would be different. It would mean that, although theoretically there might be an objective beauty property, we should be precluded from the likelihood of discovering its nature or detecting its presence or absence in particular things.

It would probably not be denied that objective judgments directed towards a non-relational formal property of beauty have more consistency among themselves than the mass of allegedly beauty judgments. But it is very difficult to say how far that consistency goes. For the literature of criticism and appreciation contains a bewildering confusion of beauty judgments of every type, most of them very complex in their logical nature, and the genuinely objective elements have never been isolated. The survey of genuine objective judgments of beauty is a work still to be done.

We may, however, point to two causes to which observable discrepancies among objective beauty judgments can be traced and nullified because explained. If discrepancy is explainable it will, as may be shown by the analogy of perception, not constitute a logical objection to our theory. We find no difficulty in maintaining belief in the objective reference of normal sense perception because some men, after a prolonged course of alcoholic training, see pink rabbits where no rabbits are, or because other men, born blind, see no rabbits where rabbits manifestly are. Differences which are explainable are automatically discounted.

(a) If objective beauty is a formal or structural quality of things observed, the capacity to observe it may be more acute in some persons than in others, and may be capable of training and development. Should this prove to be the case we should have a reasonable ground for preferring the judgments of the expert, in general and on the whole, from those of the inexperienced layman, though genuine objective judgments of the layman would still be more valuable data for aesthetic than pseudo-aesthetic judgments of the expert. We should thus escape the logical dilemma of psychological theories which concentrate upon the judgments of the expert while cutting themselves off from any logical ground for preferring these to the judgments of the layman. Further, we shall show in the next chapter that persons of

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different levels of aesthetic capacity genuinely perceive different works of art when 'looking at the same thing'. Differences in acuteness of appreciation would therefore explain many discrepancies among objective beauty judgments. If appreciation of beauty is a faculty which can be cultivated and trained, then we should expect there to be differences between the judgments of a trained and of an untrained faculty, for training of a faculty is the enhancing of its potency in the discrimination of truth or actuality.

(b) In an ordered state of society it is comparatively rarely that the individual is called upon to make genuine moral judgments. We are trained from childhood to regard certain types of behaviour as obligatory, forbidden, or indifferent; some types of behaviour are admirable without being obligatory, others are discountenanced but not forbidden. Moral imperatives, social duties and the requirements of 'good form' shade off into each other. It is forbidden to steal, but one may defraud the railway company of minor sums without incurring the disapprobation of people who regard themselves as of reasonably strict morality. It is forbidden to lie, except for the honour of a lady. And so on. These principles of conduct and degrees of obligatoriness form part of the social education which moulds the individual conscience and are in the main accepted without comment. The great majority of actual judgments about conduct assign particular actions to one or the other of these classes or bring them under one of the recognized principles of conduct. They are logical acts and not genuine moral pronouncements. The individual is chiefly called upon to make genuine moral judgments only when in changing states of society conflicting principles of classification are brought into conflict.

In aesthetics similarly habit-judgments tend to usurp the function of genuine aesthetic judgments. We have already shown how by emotional association and conditioning it is possible to react to an indifferent work of art wrongly because it has certain superficial resemblances to a class of artistic products which we have become trained to respect. In addition to this purely emotional conditioning there are current various standards and principles of criticism, such as homogeneity, representational truth, inner vitality, three-dimensional form, axial rhythm, and so on. Such standards as these—and others less consciously formu-

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lated than these—tend to become accepted criteria of beauty and when it is required to judge of the beauty of any work of art the judgment asserts that it does or does not possess these qualities. Such judgments are judgments of logical classification and derive their aesthetic character only from the initial assumption that the standards employed in judging are in very fact true tests and criteria of beauty. The habitual and uncritical use of such standards encourages snap judgments and makes it easy for the critic to pronounce a verdict on a work of art very different from the verdict which he would pronounce as the result of direct aesthetic inspection. This result is vicious because any standard for aesthetic judgment such as those we have mentioned can only be justified as a valid criterion of beauty by its conformity with judgments based upon direct inspection. When the application of standards conflicts with the verdict of direct inspection there is proof either that the application is faulty or that the standards themselves are inadequate or misunderstood. The frequency with which this happens is due to the difficulty of appreciating by direct inspection uncontrolled by previously accepted standards.

Habit-judgments are not directly relevant to the philosophical investigation of aesthetics. Only genuine and direct aesthetic judgments provide unambiguous data for science. And by means of these aesthetics will methodically inspect and evaluate the standards of criticism which are in use. Judgments of logical classification, which presuppose the validity of some aesthetic standard or standards, are the concern of the historian of taste.

It is possible consciously to embrace and to advocate with great personal conviction a theory which seems to be dictated by a particular constellation of facts, without giving credence to the full implications of the theory; or it is possible consciously to embrace and advocate two theories the implications of which are inconsistent with each other. In a world where phrases and formulae have the currency of coherent thought and where mental life is departmentalized such a state of affairs is pretty well inevitable. But when this occurs we say that the theory is not fully believed, in the profoundest sense of the word, however intense be the subjective certainty with which it is consciously embraced and advocated. Full and complete belief involves not only conscious acceptance of the theory believed but also ac-

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ceptance, conscious or unconscious, practical or theoretical, of all the implications of the belief.

Modern society concedes considerable energy and expense to educational and propagandist activity in art and aesthetics. There are many people who are working to elevate the general standard of aesthetic taste, and most professional writers in aesthetics now write with a bias towards inducing a more general appreciation of those things which are in their opinion most worthy of appreciation. These activities are recognized to be respectable, and their results to be valuable, even by people not directly concerned or interested in them. At the same time the subjective theory of beauty is widely professed and consciously embraced perhaps by a majority of people. This points to a fundamental contradiction in our attitudes towards aesthetic matters and is evidence that the subjective theory is not so fully and completely believed as the conviction with which it is consciously embraced and professed seems to indicate.

The contradiction is as follows. Education of taste is justified only on the supposition that one man's taste and appreciation is superior to another's; its purpose is to induce a change from an inferior to a superior faculty of taste and appreciation. Unless this were presumed, all educational and propagandist activities would be an impertinent endeavour to impose private preferences upon society and impudently to foist one's own emotional reactions upon others who are differently affected from ourselves. The fact that these activities are considered respectable is evidence that such a presumption is unconsciously made. Without it there could be nothing respectable in endeavouring to alter the aesthetic tastes of another man. But that presumption which is the justification of education in relation to beauty and its appreciation, is implicitly denied in the subjective theory of beauty. As has been shown, that theory is inescapably individualistic in respect of beauty. Each man's tastes and emotions are what they are, things have different beauty-relations to different persons according to their different emotional responses, and *de gustibus non est disputandum*.

Were it accepted, as a certain school of aestheticians has maintained, that in aesthetic contemplation or the enjoyment of beautiful things there comes into existence a sort of emotional

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state which is not evoked by any other things, and that this emotional state is not experienced towards all putatively beautiful objects but only towards certain ones, which are therefore said to be really beautiful—if this were accepted, there could be justification for educating others to be able to experience this special emotional state. But this assumption leads, we have argued, to the postulation of objective beauty as a reasonable hypothesis. I think it is generally recognized that the cultivation of taste and association with masterpieces of beauty is spiritually valuable to the individual and so indirectly valuable to society. But the fundamental assumption is not that certain emotional states are *more valuable* than others irrespective of the objects towards which they are experienced, but that certain emotional states *ought* to be experienced only towards certain objects. There is presumed to be in the appreciation of beauty a rightness or appropriateness between the response and the object towards which the response is experienced. And the justification of educative and propagandist activities in aesthetics is held to be their tendency to induce this rightness or appropriateness of response to the object of experience.

The notion of rightness or appropriateness implies that there is in the beautiful object some quality, which it possesses in itself, which renders certain reactions appropriate and certain others inappropriate, in virtue of which it *ought to control* the reactions of the appreciator. Such a view of beauty is objective in that the beauty of any object for any observer does not depend upon the emotions which he does actually experience towards it but upon the response which he ought ideally to experience towards it. And the qualities of the object itself determine what this response ought ideally to be.

The result of this argument will be suasive rather than apodeictic, for it is possible to hold a correct theory for faulty reasons. But all that we wish to achieve for the moment is to guard against premature rejection of any objective theory of beauty on the sole ground that the subjectivity of beauty follows self-evidently from the chaotic welter of disagreement *prima facie* observable among the actual judgments of critics, specialists and laymen about the degrees and grades of beauty in particular objects of appreciation.

Chapter V

DESCRIPTION OF A WORK OF ART

The Diversity of Beautiful Things

THERE are four main types of works of art, the products of the arts of literature, painting, sculpture and music. In addition to these main types there are the decorative arts, the useful or industrial arts, such as architecture, ceramics and textiles, and various intermediate arts, such as drama, dancing and opera, which combine two or more of the main types. To some people it has seemed impossible that there should be any one quality, the same and identical with itself, common to things which we properly call beautiful in all these arts. What common quality, it is asked, could conceivably be possessed by Sophocles's *Oedipus Tyrannus*, El Greco's 'Gethsemane', a sonata by Scarlatti, a ballet by Massine, a T'ang figurine, a Gothic cathedral, a poem by Villon, a sculpture by Maillol, the *Aeneid* of Vergil and the *Dido and Aeneas* of Purcell?¹ We cannot take this sort of argument very seriously. It is at once obvious that all the things mentioned, and all things commonly regarded as good or bad works of art, have in common at least the properties of not being minds or states of mind, of existing in time, of being the products of conscious human endeavour, and of being possible objects of human appreciation. All psychological theories of aesthetics do in fact call attention to the last of these properties and most maintain that the ascription of beauty to any work of

¹ See Lotze, who thought that 'what we are looking for as the "beautiful in itself", as a common characteristic in the different beautiful objects, can neither be a definite property nor a sum of such properties, neither a definite occurrence nor a reference—a relation, nor yet a general exponent of such relations. For beautiful objects are infinitely various, as well in respect to the nature of their particular marks, as touching the mode of their combination.' *Outlines of Aesthetics* (Ladd's trans.), p. 9.

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art or its denial depends upon whether in any particular case its appreciation involves favouring or disfavouring emotions, pleasure or the absence of pleasure, towards it. Others have tried to discover some property possessed by all works of art in the degree in which they are beautiful, some property which has no connection with the relations in which they may stand from time to time to human observers during appreciation. Now the 'infinite variety' of works of art would make it obvious at once that such a common property, if it exists, must be a highly *formal* property. But there is *a priori* no reason why such a common formal property should not exist. All works of art, even the simplest, are fairly complex for immediate perception and it has been a commonplace of artistic criticism that a good work of art must have a high degree of unity. Neither the idea of the complexity nor that of the unity of a good work of art has been sufficiently worked out. But the two notions, however vague, suggest that works of art of whatever kind may have in common the formal property of being *complex unities*. If it could be shown, and there is no initial reason why it should not be the case, that all good works of art are complex unities of a special kind, this property could well be an indication of their degree of beauty; and if this were found to be so, we should reasonably expect that the contemplation and appreciation of this special kind of complex unities might involve some special mental features which do not otherwise occur.

Before proceeding with this line of thought we must examine more attentively the nature of a work of art as such.

It is necessary to correct a common misapprehension that the objective theory of beauty implies or presupposes a theory of philosophical realism about sensory qualities. Some philosophers have written about beauty on the analogy of simple secondary qualities, like 'redness', and have called it a 'tertiary' quality of things. The analogy is not exact. It is not the case that if you assume beauty to be an objective quality you must believe that the primary and secondary qualities of material things are objective, or that if you believe the primary and secondary qualities to be subjective or mind-dependent you are bound to hold that beauty also is subjective for aesthetics. There is no relation of implication between objective theory in aesthetics and

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philosophical realism. Of course, if it is believed that primary and secondary qualities exist only as perceived, it must be held that beauty—a property of those properties—exists only as they are perceived. But it is not necessary to hold that beauty exists only as a relation to some further mental activity.

Whatever is your philosophical position about the nature of material things and their qualities, you must recognize that there are groups of sense impressions having qualities analogous to those which we ordinarily attribute to material things, that some of these groups are comparatively abiding, and that they occur in connection with those regions of space which in ordinary language the material thing would be said to occupy. You may, for instance, think that the material thing which we ordinarily call a statue has no existence independent of perceiving minds, or that it consists of spiritual monads, or of colourless, shapeless and imponderable electrons; you may deny that the shape, size, colour, etc., of the statue have existence except as perceived by this person or that; but you still must recognize that there is, pervading the region of space which in ordinary language we say is occupied by the statue, a comparatively abiding possibility of specific groups of sensations, whose qualities correspond with the qualities which we ordinarily ascribe to the statue, and such that any normal person looking in that direction will in normal circumstances experience similar sense-impressions.

When we ascribe beauty to anything at all we should, strictly, ascribe it to these groups of sense-impressions (*sensa*) and not to their material source or to the thing which 'owns' the qualities of which we become aware in perception. The beauty of the statue is not a quality of the material object of stone; the beauty of the painting is not a quality of material canvas, pigment and varnish. It is a quality which belongs to the characteristic groups of sensations which each person experiences when he is, as we say, 'looking at' the picture or the statue. I am aware that unreflective common sense is apt to ascribe beauty to the material object which we call a picture or a statue, just as it ascribes shapes and colours to the material object, and that it will seem unnatural to common sense to ascribe the beauty to the sensations experienced by the observer. But the advantage of this way of thinking is apparent when you consider music and literature.

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For whatever we mean by 'beauty', we certainly mean a quality which can belong to musical compositions and to works of literature. Yet there is no material object to which we can ascribe this beauty. It is not the printed score, the movements of the members of an orchestra, or the vibrations in the circumambient atmosphere, which have musical beauty. It is, and can only be, the set of auditory impressions, which constitute the musical composition. The Golden Cockerell New Testament may be as beautiful as the Bible Society's publications are unbeautiful; the daily Lesson may be read beautifully by one priest and atrociously by another; but these sorts of beauty are not what we mean when we say that portions of the Bible are beautiful literature. When we speak of literary beauty we speak of a quality which, whatever else it may be, cannot characterize any material object.

Unreflective common sense thinks of visual sensations as images, as it were, of qualities present in external objects of perception and instinctively ascribes these qualities to material things which are the source of sensation; it *therefore* instinctively ascribes beauty to the material thing to which it has already ascribed the qualities perceived in visual sensation. Common sense does not regard sounds as qualities possessed by the material things which are their causes, and therefore does not ascribe the beauty of auditory sensations to any material thing at all. But beauty in the visual arts is analogous to beauty elsewhere. (To what material 'thing', for instance, could we ascribe the beauty of a dance?)¹ The beauty of a picture belongs primarily to the groups of sensations which have their source in the material thing which is the picture. If we hold, with philosophical realism, that colours, shapes, etc., are intrinsic qualities of material things, we shall also hold that the material picture has in a secondary sense a beauty analogous to the beauty we ascribe to the sensations which originate from it. Whether this is so or not, is a problem which, however interesting in itself, has nothing to do with aesthetics. For the aesthetician all beauty is always and only

¹ Recent experiments of Picasso in 'painting in light', when the movements of a light-point with which the artist draws are photographed, illustrate the essential identity between the apparently static beauty of a drawing and the fleeting beauty of movement in dance.

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a quality of certain complicated and recurring groups of sensations. The further question whether the beauty of visual sensation-groups reflects an analogous quality belonging to the material things in which these sensations have their source, is outside the scope of aesthetics.

A work of art is, then, a permanent possibility (not a continuing existent), which is actualized from time to time for this or that person or group of persons. A work of plastic art is actualized when any competent observer looks at a picture or a sculpture. A work of musical art is actualized when a competent listener hears the organized construct of sounds which is that work of art. A work of literary art is actualized when any competent person reads or hears read the construct of words which is that work of art.

Professor H. S. Goodhart-Rendel¹ has suggested a useful distinction between the *material* and the *vehicle* of a work of art. 'For the production of any art there are two necessities: the material with which the artist creates, and the vehicle by which his creation is conveyed to the perception of others.' (*Fine Art*, p. 3.) We shall adopt this distinction, though in rather a different sense from that of Professor Goodhart-Rendel. We shall call the *material* of any work of art the class of *sensa* which are organized by the artist and apprehended by the appreciator in that work of art. The material of music will be *sounds*, the material of sculpture and architecture *masses*, the material of literature *words* and *meanings*, and so on. A work of art is a specific and unique organization of these materials, such that the organized construct has beauty.

As has been said, the *material* of any work of art only becomes actualized when it is present either to perception or in the imagination of some person. There is no such thing as an unheard

¹ Professor Goodhart-Rendel calls the ideas of sounds the material of music, the ideas of masses the material of architecture. Actual sounds and masses he calls the vehicle. He is led to this linguistic suggestion by the fact that some artists sometimes have a complete mental image or 'idea' of the work of art they are about to fashion before creating it (Mozart but not Beethoven in music). The inconvenience of this terminology is shewn by the fact that in his language the words 'idea of a work of art' retain no meaning distinct from the meaning of the words 'material of a work of art'.

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sound, an unseen visual sensation or an unapprehended meaning. The *vehicle* of a work of art is that which, persisting unchanged through time and outside perception or apprehension, enables (more or less) the same *organization of material* to enter the experience of different persons at different times. The vehicle of a work of plastic art is what is commonly called the picture, an arrangement of pigments upon canvas, wood, plaster or what not. The vehicle of a work of architecture is a building of stone or concrete. The vehicle of sculpture is a fashioned piece of stone, wood, metal, etc. We need not ask ourselves any metaphysical questions about whether these 'material substances' which are the vehicles of works of art have existence apart from perception. From the point of view of aesthetics they endure through time and create the possibility for the same work of art to be actualized in experience from time to time; and this is all that concerns aesthetics.

With music the case is rather different. The musical score is the only thing which remains unchanged through time, but this score is not in itself sufficient to enable a musical composition to be actualized.¹ Performance is also necessary and performance means the creation of the physical sounds which are recorded in the score. A performance can be duplicated, with varying degrees of exactness, by means of the gramophone or the wireless; but each performance differs from each other performance, although all are performances of the same musical composition.

If a beautiful picture is painted, all that is further needed for its actualization as a work of art is that a competent observer should look at it. But musical composition must be both recorded as a score and the score performed to a competent audience. Musical recording is imperfect and its interpretation demands not only technical competence and understanding but artistry in the per-

¹ When a trained musician 'reads a score' he is imagining or recalling the sounds which would be produced in its performance. A person who reads a poem may similarly 'imagine' the sounds of the words instead of pronouncing them. But the *meanings* involve imagery or apprehension which goes beyond the words themselves as sensory objects. Thus the relation of literary art to experience is less direct than the other arts. In so far as literary art is the organization of meanings, its material is not sensory in a primary sense.

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former. No one performance, however beautiful it is, completely and finally actualizes a great composition. The composition stands as something above and beyond the interpretations of the various performances.

The following story from a letter written by Amy Fay (19th June 1873) illustrated the difference between the performance of an artist and a merely competent performance. 'I've never seen Liszt look angry but once, but then he was terrific. Like a lion! It was one day when a student from the Stuttgart Conservatory attempted to play the Sonata Appassionata. He had a good deal of technique and a moderately good conception of it, but still he was totally inadequate to the work—and indeed only a *mighty* artist like Tausig or Bulow ought to attempt to play it. It was a hot afternoon, and the clouds had been gathering for a storm. As the Stuttgarter played the opening notes of the sonata, the tree-tops suddenly waved wildly, and a low growl of thunder was heard muttering in the distance. "Ah," said Liszt, who was standing at the window, with his delicate quickness of perception, "a fitting accompaniment." If Liszt had only played it himself, the whole thing would have been like a poem. But he walked up and down the room and forced himself to listen, though he could scarcely bear it, I could see. A few times he pushed the student aside and played a few bars himself, and we saw the passion leap up into his face like the glare of sheet lightning. Anything so magnificent as it was, the little that he did play, and the startling individuality of his conception, I never heard or imagined. . . . The Stuttgarter made some such glaring mistakes, not in the notes, but in rhythm, etc., that at last Liszt burst out with: "You come from Stuttgart, and play like *that!*"'

It is probable that in any great musical composition there are more intricate formal relations than can be actualized in any one performance. The crisp perfections of Schnabel's performance of Beethoven's sonatas, which gives to it an impression of finality, is obtained by his decisive and consistent emphasis upon certain groups and types of relations within the compositions to the exclusion or subordination of all other formal relations which are potentially present. The recording of volume-relations and time-relations is a very crude device when compared with the

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subtleties of a fine performance.¹ Our knowledge and conception of a great composition is a composite record of a number of performances, to which each person adds something of his own. Thus the beauty of a musical composition is a wayward and an evanescent thing because the composition is intangible, never perfectly or completely actualized, never measurably the same for two competent appreciators.

Performance is also necessary in the arts of drama, opera and ballet, although in these arts recording is far less exact than in the art of music. We judge between the relative excellence of any two performances of the same work of art and when we so judge we do not only refer to technical skill or exactness of reproduction. The element of interpretation is regarded as important. In other words, a work of musical or dramatic art, an opera or a ballet, has only a relative permanence and unchangeableness. Each actualization is a combination of the creative activity of the artist with the creative activity of the performer; a minor creative function is allowed to, and expected of, the performer. This results of necessity from the nature of the case and because techniques of recording are imperfect.

For actualization of the work of art the performance must, of course, have a competent audience. The physical disturbances in the air caused by the players of an orchestra become organized sounds in the ears of a listener. A picture hanging in an empty gallery is analogous to a gramophone playing in an empty room.

The case of literature is midway between that of music and painting. The vehicle of a work of literary art is a set of words, which may be printed in many thousands of books, reproduced in Braille, spoken and recorded on a gramophone, microfilmed, etc. No one of the resultant physical objects is more truly *the* vehicle than another. A picture may be mechanically reproduced with various degrees of exactness but no reproduction has the status of authenticity possessed by the original picture which is *the* vehicle of this work of art. (In some pictorial art such as lithographs, silver-points, etchings, woodcuts, a limited number of vehicles may exist for the same work of art all of equal authen-

¹ The general use of the 'phon metre' (used, I believe, only by Stokowski among composers) could render volume recording almost exact as time recording with the metronomic indications.

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ticity, and in modelled sculpture a limited number of casts may be made from one plaster. But this does not invalidate the principle to which we are inviting attention.) In the case of literary art the appreciator must also fulfil something of the functions of a performer. Literary art also differs in that the apprehension of the *meanings* conveyed by a set of words involves both imagery and discursive apprehension to a much greater extent than in the appreciation of other forms of art.

Works of art are not, then, a special class of material things—pictures, statues, buildings—they are material things only incidentally, and in the case of music, literature and dance it is doubtful whether they can be called material things in any conventional sense at all. When we speak of any ordinary material object, such as a chair or a table, we mean a piece of matter of specific shape, size, colour, etc., possessing the property of impermeability or solidity. You may sit upon a chair and a table will support food or books. Pictures and statues and buildings are material objects in the same sense. A picture can be hung over a discolouration on the wall or used as a breakfast tray; a statue occupies a certain space in your hall and may be used as a hat-rack. They do not have these functions *qua* works of art but accidentally *qua* material things. Any picture or statue could fulfil these functions whether it were a work of art or not. When we think of a picture as a work of art, that it undoubtedly is also a material object is accidental and irrelevant. As a work of art it is simply the source of a specific set of visual impressions. Its beauty, if it has beauty, is a complex quality of the set of visual sensations which are the picture. Of course these visual *sensa* have their origin in a certain arrangement of paint on canvas or wood, which are both material. And this becomes important when one is studying the technique or craft of making pictures. But when one is investigating beauty it is important to recognize that what we mean by beauty is a property of sets of sensory impressions, and that it is a property of material things only, if at all, in a secondary way, because some of these sets of impressions happen to have their source in material things.

The only quality which works of art have in common with material things in general is a relative permanence. We may therefore provisionally define a work of art as an enduring pos-

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sibility, often enshrined or recorded in a material medium, of a specific set of sensory impressions which is characterized by the quality we call beauty.

This analysis may seem too curious and sophisticated. But it is necessitated by the nature of the subject and is essential to accurate thinking about aesthetics. The speciousness, for example, of the subjective argument from the 'diversity of beautiful things' is clearly derived from a superficial confusion of the work of art (which alone may be said to 'have beauty') with the vehicle. If we once grasp the fact that a work of plastic art is not a picture which might be pressed into service as a tea-tray, but is a permanent possibility of a specific and unique arrangement of visual impressions, enshrined and recorded in the material paint and canvas, just as a symphony is a permanent possibility of a specific and unique arrangement of auditory impressions, the suggested difficulty vanishes. It is no longer difficult to allow that an arrangement of auditory impressions may have qualities in common with an arrangement of visual impressions.

It is the function of aesthetic science to investigate the general principles of all beauty, in whatever medium it inheres, and also to investigate the subsidiary principles, special to each art, according to which the general principles of beauty have application in a particular medium. The method of research into the general principles of beauty may be by way of analogy between the special characteristics of the several arts until certain characteristics are found which are universal. But familiarity with aesthetic procedure in the past shows how easy it is to be misled by spurious or inessential analogies between superficial characteristics and it needs only an ordinary amount of modesty for the modern student to realize how easily he too may be led astray by different but equally false analogies. The other method depends upon a very thorough investigation of each of the arts separately. For if we discover the most general principles of beauty in any one art we shall have discovered the general principles of beauty in all the arts. The conclusions reached by investigation of any one art will be corrected and modified by comparison with conclusions achieved by equally minute investigation of the other arts. The method is that of critical co-ordination of the results of a set of specialized researches and

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ideally demands continued co-operation among a number of qualified workers under the control of one organizing mind. I believe that until this becomes possible there is unlikely to be any valuable advance in scientific aesthetics.

Empirical Study

Professor Kirschman wrote: 'A picture is a surface (a part of our field of vision), consisting of smaller surfaces which differ in space relation (extension, shape, arrangement), light quality (colour-tone and saturation), light intensity. All properties which the picture as a whole or in its parts possesses, must be reducible to qualities or relations of these small surfaces. Consequently, any quality attributed to the work of art or its parts must be capable of being expressed in terms of these five or six variables.' The basis for further empirical study of aesthetics must be an investigation of the variables and constants of each art-form. Some progress in this direction has already been made by the so-called 'phenomenological' school of psychology and by certain psychologists outside this school who have studied perceptive experience as immediate experience and not in the interests of rationalizing interpretation.¹ Some work has been done upon the physical background of music and painting which makes useful contributions to the understanding of the relations between the 'vehicle' and the 'material'.² But as a basis for aesthetics the work that has been done is partial and incomplete. The complete investigation requires co-ordinated labour of a number of trained investigators and could not fall within the competence of one scientist.

What follows is intended only as a brief indication of the type of study which is needed.

a. MUSIC

Music has been called the 'purest' of all the arts because it is the one art which is never representational or useful in conception. Even 'programme' music and musical compositions which, compared with the majority of music, are representational (e.g. Mendelssohn's 'Spinnerlied', Op. 67, No. 4; Honegger's 'Pacific

¹ e.g. Richards, *Colour Harmony*; Katz, *The World of Colour*.

² e.g. On music, Helmholtz, *Sensations of Tone*; Jeans, *Science and Music*; Miller, *The Science of Musical Sounds*; Wood, *The Physics of Music*.

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231'; Debussy's Prelude, 'Le vent dans la plaine') do not have real semblance to non-musical sounds but 'represent' by suggestions *within* recognized musical conventions. Representation in music is rarely by imitation of actual sound, but usually by giving prominence to a characteristic interval (c.g. 'Le Coucou' by Claude d'Aquin; the opening to 'Les Ânes' by Gabriel Grovlez; the 'farmyard' noises in the last movement of Prokofiev's Sonata No. 2 in D Minor) or by inducing the emotional suggestiveness of a characteristic rhythm (c.g. Sterndale Bennett's 'Musical Sketches', Op. 10; 'La Commère' by Couperin). Chopin's 'Butterfly Prelude' or 'Papillons' from Schumann's 'Carnaval' suggest the flight of butterflies by the same methods, and as vividly, as the suggestions which are made in Debussy's named *Preludes* or in compositions like Moussorgski's 'Pictures at an Exhibition'. There is in music no more real imitation of non-musical sounds such as the surge of the sea than imitation of the butterfly on the wing or the fall of the rain.

Though music is the 'purest' of all the arts, there are two serious dangers in basing a theory of beauty on the investigation of music. (1) Music has also been called the most 'formal' of the arts in the sense that the sounds of music are more susceptible to mathematical analysis than the materials of other arts. Early Greek philosophers used to elaborate mystical significances from the mathematical relations among musical 'harmonics' and many aestheticians have delighted in working out analogies and comparisons between the proportions by which the musical intervals are represented and proportions discovered in other arts. All analogies of this sort are both false and improper for the following reasons: (a) There is insufficient evidence that those intervals which can be represented by commensurate proportions are universally necessary to the production of musical beauty, whereas musical compositions which are undoubtedly beautiful can be composed for and performed on instruments of equal tempering, where the intervals do in fact imperfectly correspond to the proportions presumed in all theoretical comparisons. (b) The numerical proportions represent physical wave-lengths and no direct correspondence between their combinations and the resultant auditory impressions can be shown. (c) The musical scale is part of the musical material which is to be enformed and

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not an element in the form of a composition. Even the intervals of pure intonation may have been adopted as a musical convention for the accidental reason that their production demands the division of a string at mathematically simple intervals. (*d*) The most beautiful composition does not manifest the alleged proportions to a greater degree than a composition entirely devoid of beauty provided that both make use of the same scale. This is a corollary of the fact that the intervals and the proportions to which they correspond belong to the un-enformed material of music and are not an element in the form of a beautiful musical composition.

(2) Music seems to be the least universal of all the arts. The music of one race is not easily appreciated by another and habituation in a particular 'musical idiom' seems to be far more necessary for instinctive appreciation of musical compositions in that idiom than habituation to an artistic style is necessary to initial appreciation, at any rate, of plastic art in that style. To me, as to most Europeans, Chinese, Tibetan, and much Indian music is simply intolerable or wearisome noise. In antiquity also the music of Eastern races seems to have been outside the power of Europeans to appreciate. Thus Quintus Curtius tells how when an oracle was sought at the temple of Zeus Ammon the priests conducted the sacred image on a gilded raft and 'women and girls follow, singing a rude and unmusical chant (*inconditum carmen quoddam*) in their traditional mode'. Again he describes the singing of captive Persian women as 'rude and unmusical to foreign ears' (*inconditum et abhorrens peregrinis auribus carmen*).¹ For this reason there is danger in confusing characteristics which belong only to one restricted musical convention with characteristics of formal musical beauty as such.

European music is a complicated structure within an extremely artificial convention of recent growth. The artificiality of, for instance, equal tempering is due not to musical or artistic reasons but to a mechanical necessity inherent in the limitations of 'fixed tone' instruments. Since comparison with other musical conventions is precluded by the limitations of appreciation, the investigator must always guard against being misled into thinking that some principle which is intrinsic only to the conventions

¹ Quintus Curtius, IV, 7, 24 and VI, 2, 5.

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utilized in European music is an ultimate principle of musical beauty and above convention.

The variable qualities common to all musical sounds are pitch, timbre and volume. We call a musical sound an auditory impression which has these three variables fairly well defined and distinguish it from a non-musical noise.¹ Thus the material of music consists of a limited class of auditory impressions; those sorts of auditory impressions which are not potential material for music we call noises. Certain non-musical noises have recently been introduced into European and American dance orchestras for the purpose of emphasizing what is called the rhythm. It is characteristic of the type of 'music' in which these sound devices are employed, that it does not aspire to aesthetic musical beauty and its purpose is not to induce in the audience aesthetic appreciation but to stir them to overt reaction in dance.

The variable *pitch* is limited by the capacity of the human auditory faculty. There are, for instance, physical sound-stimuli which are audible to certain animals but inaudible to the human ear. The range of pitch producible by musical instruments is less than the range ideally audible. The limitations of *timbre* are highly artificial and are determined by the choice of instruments which is peculiar to our own musical tradition, each instrument being designed to produce musical sounds of characteristic *timbre* within a limited range of *pitch*.² Volume, or loudness, is limited at the lower level by audibility and at the upper by the power of the instruments employed to produce volume without losing *timbre* in noise. The minimum audible increment of loudness under normal conditions is about one *phon*.³ But much smaller differences are noticeable as roughness in musical execution.

These three qualities are independently variable. They may be 'explained' physically and mathematically by analysis of the

¹ 'Musical sounds are those which are smooth, regular, pleasant, and of definite pitch. Unmusical sounds are rough, irregular, unpleasant, and of no definite pitch. The classification is only approximate at the best.' A. Wood, *The Physics of Music*. The distinction is also well drawn by Jeans in *Science and Music*.

² Some instruments produce sounds of more than one characteristic *timbre*, e.g. stringed instruments may be bowed or plucked. All instruments may be well or indifferently constructed, well or badly played, for *timbre*.

³ Wood, Chapter 3.

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sound waves by which musical impressions are caused, but to sense impression they are ultimate and unanalysable qualities.

Equally immediate and unanalysable to sensation is the combination of sounds at various levels of pitch to produce 'intervals', whether the sounds are simultaneous or successive. *Chords* or groups of simultaneous sounds with specific pitch intervals between them have characteristic sensory qualities of their own to immediate apprehension which are not for sensation analysable into a summation of the notes of which they are

composed. The three chords $\begin{array}{c} C' \\ A \\ F \end{array}$ $\begin{array}{c} C' \\ G\sharp \\ D \end{array}$ $\begin{array}{c} C' \\ E \\ D \end{array}$ have as great indi-

viduality for immediate sensation as single notes; they may be sensed as single sounds. That they are not for sensation simply a summation of the sounds of which they are commonly said to be composed is illustrated by the fact that a chord of two, three or more notes may in one context be heard as a single musical sound (a chord) and in another context as so many distinct sounds, each of which belongs to a melody when two or more melodic lines occur simultaneously.

It seems possible that the combination of sounds of different *timbre* may also be sensed immediately as a characteristic musical sensation, though I think we normally tend to do this in sensation less than we tend to sense directly combinations of pitch. Thus if the note C is played on the violin and the G above it is played on the flute either simultaneously or successively, we are more directly and immediately aware of the characteristic pitch-interval than of a characteristic union of two *timbres*. It appears likely that the construction of complicated unities of *timbre* may have more importance in Chinese and Oriental music than for music in the European tradition. Theoretically *timbre* can be reduced to pitch as differences of timbre are explained by the special combination of 'harmonics' or partials produced with each basic note. But sensorily and for direct experience *timbre* is ultimate. We should hear less of the instinctive 'touch' on the piano of little Jackie ('who has never had a lesson in his life, bless his little heart!'), and understand better the 'tone' of the sensitive virtuoso, if it were realized that a single note on the piano can vary *only* in loudness and not in quality of tone. (More

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accurately: a single note played on the same instrument will have different *timbre* when struck with different degrees of loudness, owing to difference of proportion among the harmonics; but at the same degree of loudness it will always have the same *timbre*, *whoever does the striking*.)¹ 'Tone' in the performing is the result of relations of loudness among the various notes of a musical structure; and 'touch' is the physical means of controlling tone.

Melody is at its most elementary a characteristic configuration of pitch intervals sufficiently simple to be apprehended as a single entity and sufficiently complex to be apprehended and recognized as individual. The sounds of a melody are successive and may be (usually) single notes (with or without the accompaniment of chords when a melody is part of a musical composition) or may themselves be chords. In melody we come nearest to seeing what is meant, at its simplest and most elementary, by an 'organic unity' in art. A melody is apprehended, recognized and remembered as a single unit not as a construct of the notes and intervals into which it may be broken down. The same melody may be played at different pitch, with different *timbre* and with different volume and remain the same. When a single-note melody is played as part of a musical composition some of its notes may form parts of chords and yet they will be heard as constituent parts of the melody to which they belong although they are not distinguished from the other chord-notes by greater volume. The melody is, then, a direct and immediate unity for sensation. It is sensed as a construction of notes and intervals. It has relative individuality and independence so that within limits the intervals from which it is built may be changed (as a simple example, it may be played in major or minor key) or the rhythm may be altered, while the melody remains recognizably the same. As a unit configuration a melody has completeness, individuality and relative stability. Mathematically it is possible to give a complete description of the intervals which go to build up the melody; but in sensation the melody is a prior and im-

¹ This is because the chords of the piano are not struck by the hammer as if it were used as a hammer; the hammer is as it were *thrown at* the chords. (Leschitzky is said to have compelled his pupils to study the production of different 'tones' by striking single keys, before proceeding to more complex study!)

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mediate *datum*, it is not constructed from simpler sensations additively and cannot be broken down into them. For sensation the individual elements of a melody obtain their character from the whole melody, not the reverse.

Finally, into the structure of melody as such enters the element of time-lapse and duration, or extendedness through time, is a fourth and necessary variable of the material of music. In musical notation the relations of time-interval are recorded and in the performance they are almost as exact as, and not less important than, pitch-intervals. A characteristic set of time-intervals may be repeated, with or without variations, and together with emphasis (usually given by differences of volume) constitutes *rhythm*. Rhythm is also an immediate and primary *datum* of sensation in music, capable of individuality and variation though susceptible of far less subtlety, complexity, individuality and variety than melody. While rhythm can exist without melody and elementary rhythms without any other important musical material (a military drum or the double bass as used in a dance orchestra), melody cannot achieve any high degree of configurational individuality without some element of rhythm. What we mean by a melody in ordinary language is a *rhythmic* configuration of pitch-intervals. While rhythm may exist independently, its main importance in music is as an element in configurations which are immediately presented to sensation as melodies.

The importance of time-lapse in music is shown by the fact that a specific and exact time-lapse of silence may be as significant as a time-lapse of sound. In the verbal arts of literature and drama the element of time is a necessary constituent in the sense of before and after. The sequence in which words precede and follow each other is fixed. But there is no exact division of time intervals.

In another and more general sense time is a necessary factor in the actualization of all those forms of art which require performance. The performance time of a piece of music is more or less, though not exactly, defined and if a composition whose performance time is set at about an hour is performed in half an hour, the performance is bad. A picture, a sculpture, a building persist through time as the permanent possibility for the coming into existence of beautiful sets of sensations, just as the score of a

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musical composition or the printed text of a drama persist through time. But for the former to be actualized it is necessary only that they be observed by some competent person and the act of observation may be momentary or brief. Appreciation is usually based upon the recalled results of a number of relatively brief acts of observation. In those arts where performance is necessary the act of observation is extended in time because that which is observed is extended in time and the act must be psychologically extended through the whole period occupied by the performance. Throughout this act the mind must be keyed to a constant pitch of attention and sensitivity. It must be prepared to apprehend with immediacy not only isolated organic unities of melodies, rhythms, thematic configurations, etc., but the embracing unity of the musical composition as a whole, which is being presented *through time* during the performance. During this act individual judgments about presentation or sectional relations within the work of art itself will intervene. But the final awareness and appreciation of the work as a single organic unit, an organic unity composed of simpler and gradually more complex contained unities, its appreciation as a beautiful entity extended in time, will be possible only when the extended act of observation is recalled imaginally and we become aware of the composition timelessly.¹ It requires considerable

¹ An experience which has occupied an appreciable time-span—a day at the seaside, an emotional scene—may be recalled in imagination as something which occupied so much time-span, whose elements stood in such and such time-relations to each other and the whole, yet the act of imaginative recall may be itself momentary or brief. So, in greater precision, music, literature, dance, must be imaginatively recalled and the experience of them recreated in appreciation.

The most commonly quoted passage is from a letter somewhat doubtfully attributed to Mozart, describing the psychological process of composition in himself: '... my subject enlarges itself, becomes methodized and defined, and the whole, though it be long, stands almost complete and finished in my mind so that I can survey it, like a fine picture or a beautiful statue at a glance. Nor do I hear in my imagination the parts successively, as they are hereafter to be played, but I hear them in my fancy as it were simultaneously all together. And that is a feast indeed!' Beethoven composed as painfully as Mozart with facility. But every composer—as everyone who fully appreciates—must at some stage 'image' the whole composition at once. This may be done with more or less clarity and precision and does not of course necessarily involve 'aural imagery' or actually hearing imaginal notes played.

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natural capacity or training of the appreciative faculty to be able to listen to a symphony and subsequently recall for appreciation all its relations of pitch, *timbre*, volume and time-intervals, not theoretically by discrete memorization, but with the same immediacy that some people can become imaginally aware of a simple melody without whistling it through. The theoretical understanding of the principles of musical composition and theoretical knowledge of the formal structure of a particular musical composition may help to 'condition' the mind to receptivity, provided that they can be kept in abeyance and are not allowed to intrude during appreciation. But the power to appreciate is based upon a training of the *listening* faculty itself and should enable the listener to become auditorily aware of ever more subtle distinctions among auditory sensations and ever more complex auditory organic wholes. This obviously requires a training of the power of attention in general as well as the listening faculty in particular. Few music lovers have more than a very elementary power to apprehend (become aware of) or appreciate music. During any musical performance the majority of the audience wallow in a tepid bath of emotional ripples, while listening is lulled by casual memories evoked, pictorial images, vague day-dreaming, and attention is recalled from time to time to the performance only to lapse again. This form of self-indulgence and mental weakening, this sapping of the normal gifts of aesthetic attention, is encouraged by the modern addiction to dance music as a background to restaurant feeding and conversation; the process has gone so far that many people even use great musical compositions, through the instrumentality of the wireless or the gramophone, as a background noise during conversation or work. To this type of audience musical sound is a soporific not a stimulus; however much emotion is professed there can be no possibility of appreciation. Without listening one cannot hear; without hearing one cannot become aware; without awareness there cannot be appreciation. True appreciation requires the training of mental capacity to a high level of alertness and sensitivity, concentration of trained attention and strenuous effort to hold in the mind as a unity an experience which is too great for it. Otherwise the aesthetic stimulus will be apprehended as a set of separate stimuli related to each other only externally,

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and the specifically aesthetic properties of the aesthetic object will not penetrate to awareness.¹

b. PAINTING

So much has been written about visual sensations, which are the 'material' of plastic art, and so much literature is available for those who wish to study, that it is proposed here to deal cursorily only with a few of the most important characteristics for our purpose.²

There is, first, for visual art no limited class of visual sensations analogous to the distinction between noises and musical sounds. All possible visual impressions which can be controlled so as to become relatively permanent to a given context of sensation are potential material of visual art. There are certain accidental limitations inherent in the physical substances available to the artist in constructing his 'vehicle'—for example, while all the colour-hues perceptible by the human eye can be ideally produced in pigments, the range of luminosity available in pigments is less than one-tenth of the range of perceptible luminosity in nature.

¹ 'Both in scope and in articulation musical faculty varies prodigiously. There is no fixed limit to the power of sustaining a given conscious process while new features appear in the same field; nor is there any fixed limit to the power of recovering, under changed circumstances, a process that was formerly suspended. A whole symphony might be felt at once, if the musician's power of sustained or cumulative hearing could stretch so far. As we all survey two notes and their interval in one sensation . . . so a trained mind might survey a whole composition. This is not to say that time would be transcended in such an experience; the apperception would still have duration and the object would still have successive features, for evidently music not arranged in time would not be music, while all sensations with a recognizable character occupy more than an instant in passing. But the passing sensation, throughout its lapse, presents some experience; and this experience, taken at any point, may present a temporal sequence with any number of members, according to the synthetic and analytic power exerted by the given mind. What is tedious and formless to the inattentive may seem a perfect whole to one who, as they say, takes it all in; and similarly what is a frightful deafening discord to a sense incapable of discrimination, for one who can hear the parts, may break into a celestial chorus. A musical education is necessary for musical judgment. What most people relish is hardly music; it is rather a drowsy revery relieved by nervous thrills.' Santayana, *Reason in Art*, pp. 50-1.

² One of the best studies is A. Pope, *Introduction to Drawing and Painting*.

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When two pigments are mixed, the luminosity of the mixture is often less than that of the original pigments. But these are limitations of the 'vehicle', and concern primarily the artist who creates and the appreciator more indirectly.

In general, though not always, a picture is constructed so that it occupies a limited part of the total field of vision and attention is required to be concentrated from the total field upon the portion of the field occupied by the picture. The use of a frame is designed to facilitate this concentration of attention from the whole field of vision. If the frame is itself highly decorative and the picture is, as it were, extended into the frame, the frame no longer fulfils this function.

The artist makes positive use of the limitations of human vision and a picture is constructed so that it can be seen only at a certain distance. The distance will vary as one observer is short-sighted and another long-sighted, but for each observer there will be an ideal viewing position from which the chunks of inchoate pigment merge into coherent forms and the picture becomes itself, while the more subtle gradations of form are not lost. If a picture is so constructed that some incidents can only be seen from close up while other general forms only become visible from farther away, it is badly constructed; the observer is required somehow to combine two or more views, which present different sets of visual sensation, and the artist has failed to construct a unity.

Colour sensations have three independently variable qualities: (1) *Hue* or position on the colour circle. (2) *Brilliance* or gradation upon a black-white scale; and (3) *Saturation* or degree of intensity of a given hue within a coloured area as compared with a neutral grey. All colour sensations have each of these three determinable qualities at some determinate degree. Colour sensations also have the property that when two sensations which contrast in any of the three variables are juxtaposed in the visual field, the sense of contrast is heightened. Finally, different hues tend to focus at different distances in human vision, so that when contrasting hues occur in the same visual field some tend to seem nearer and some more distant from the observer. The last property of colours has been utilized by artists to create what is known as 'colour perspective'.

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The content of the visual field consists of extended patches which by their demarcation one from another acquire shape. The boundary between one extension and another provides *line*. For in vision line is not a geometrical fiction but a visual reality. Line may have character, quality and functions of its own and although much has been written about line in the literature of appreciation, little serious study has been made of its visual qualities and functions. Shapes are specially apt to be seen as organic unities in direct sensation. It is thus that we recognize the characteristic shapes of things when 'suggested' by the artist in a few apparently simple lines. While the child or the amateur draws 'theoretically' two eyes, a nose and a mouth in a face, two legs, two arms and a head for a human body, the artist draws the characteristic and organic shapes presented directly to non-theoretical perception. Shapes also often have strong emotional appeal either through association (Dali) or apart from conscious associations (Tanguy; Chirico).

Any artistically organized set of visual impressions has what has been called *picture space*. The concentration of attention upon a small section within the whole visual field enables the space relations within that section to become autonomous and their real relations to the space outside the picture to be lost. A similar phenomenon occurs in an elementary way when attention is focused upon the screen at the cinema. Picture space may be organized by the use of traditional perspective or a different form of perspective such as was developed by the Chinese, by the use of pure colour perspective, by the organization of non-representational black-white masses in such a way as to convey the optical 'illusion' of solidity and depth or by pure line employed to suggest shape. It may be two-dimensional. But in some form it is always present.

C. SCULPTURE

Very little serious work has been done upon the basic properties involved in the appreciation of sculpture and I propose here only to indicate three characteristics which are extremely important in learning how to appreciate sculpture in the round.

1. Sculpture in the round, as distinct from carving in relief, exists as a solid object in space which can be looked at from all

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points of view, from above and below and from all sides. (Some architectural sculpture designed to occupy a fixed position in relation to a building is viewable from a limited number of angles only, but it is always viewable from more than one angle and the principle to be enunciated is the same.) A piece of sculpture can therefore not be seen at one glance. We cannot see the back and the front and the sides at the same time. For observation a sculpture is a set of silhouettes which are obtained by the observer successively, though in no fixed order, as he moves round the physical object which is the sculpture and are then combined imaginally into one object for appreciation. As our vision is stereoscopic, each silhouette is not flat but is itself a percept of a solid object. We never see the sculpture as a whole but we see a series of 'sections' and these we must ourselves combine. A sculptor must create a construct to be viewed from innumerable angles and to be appreciated as an organic unity of all possible 'sections'. As an organic unity, each partial vision will gain its character from the composite imaginal vision of the whole when the successive viewpoints are combined. It is in this way that sculpture must be appreciated.

It is for this reason that the so-called optical 'shape-illusions' are important in designing architectural sculpture but cancel out and are often neglected in designing drawing-room or museum sculpture. It is for this reason too that photographs of sculpture are so inadequate. For a photograph gives only one section out of many. And this is why 'artistic' photographers of sculpture try to create a separate work of photographic pictorial art by the use of light and shadows instead of trying to photograph the sculpture and allowing it to speak for itself. I have sometimes heard it said that a work of sculpture looks better in photograph than when seen in actuality. When this is said, you may be sure that the speaker has appreciated the rather crude work of pictorial art offered by the photograph but has failed to look at the sculpture as it should be seen. A good photographer does not need a good piece of sculpture in order to create a striking work of photographic pictorial art.

2. The painter often manipulates his pigments so as to create the semblance of a three-dimensional picture-space. Although he is working in a two-dimensional physical medium, he creates

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a sense-impression which is three-dimensional. He is, if you like, creating an illusion. But strictly speaking there is no such thing as sensory illusion. What is presented directly in sense-perception simply is what it is and cannot be illusion; it may gain or lose in precision and definiteness by the variations of attention, but it can never be false. What is commonly called 'sense-illusion' is mistaken inference from sense-presentations when perception is used practically for the recognition of external things or as a guide to action. If you believe or assume that you could in actual fact walk through the streets of a painted picture, your belief is false and you are suffering an illusion. Belief based on perception, whether it be tacit or overt, may be illusory; but the statement that the perceived sense-impression itself is illusory is quite meaningless. Your sense-impression really is three-dimensional, although the physical paint and canvas which causes it is two-dimensional in external space.

As sculpture is already in three dimensions, there exists no other visual dimension of which it could create the semblance. But much good sculpture creates a perceptual semblance or, to speak loosely, an 'illusion' of a property not present in the three-dimensional physical medium, which is sometimes described as the 'fourth dimension' of sculpture. It is a property which is very little understood and very difficult to circumscribe. I remember Frank Dobson once described it to me as the semblance of an equilibrated push from the centre outwards towards the surface, but not beyond the surface, in all directions. It is this property which Henry Moore probably had in mind when he spoke of 'alert dynamic tension'. It is often referred to as 'vitality' or 'energy'. I think that Moore partly had this quality in mind when he wrote the words we have already quoted from *Unit One*: 'For me a work must first have vitality of its own. I do not mean a reflection of the vitality of life, of movement, physical action, frisking, dancing figures and so on, but that a work can have in it a pent-up energy, an intense life of its own, independent of the object it may represent.' But this quality of inner vitality is not the same as the quality referred to as the 'fourth dimension' of sculpture, for the former but not the latter is present in some pictorial art. Roger Fry described it in his *Last Lectures*: 'Some (artistic) images give us a strong illusion that

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they possess a life of their own, others may appear to us exact likenesses of living things and are yet themselves devoid of life.' And he went on to say: 'Now let me confess at once that I know very little about this quality. It seems to me very mysterious, and I find it difficult to allege any explanations of why it occurs when it does, by what exact processes the artist gives the illusion; and yet further I do not know quite what value we ought to attach to the quality, or what its relations are to other aesthetic qualities.' In Henry Moore's work the qualities of 'vitality' (which occurs in some pictorial art) and the 'fourth dimensional' quality (which is exclusive to solid sculpture) are very intimately associated. I am, however, convinced that these are two distinct qualities and not one and the same. And I am convinced that they are as genuinely objective qualities, directly apprehensible in immediate perception, as picture-space. They are not due to 'empathy' as may be the case when we say that certain lines have 'movement' or that some Indian sculpture has 'movement'. A sculpture having this four-dimensional 'push' (it is necessary to have recourse to the *language* of 'empathy' since we have no descriptive language with which to indicate the more subtle qualities of configurations presented in sensory experience) may give the emotional impression of static fixity rather than of movement.

This property has been much sought after by modern sculptors and I have heard it maintained by several that it is essential to all good sculpture. I am fairly sure that this is not true. I think that there can be good and beautiful solid sculpture without this 'fourth dimensional' semblance, as there can be beautiful pictorial art without three-dimensional picture-space. Yet it is a quality which everyone must be alert to apprehend who would be capable of appreciating and enjoying sculpture as it is.

3. The physical nature of the medium is thought to have an importance in sculpture greater than in any other art and to have some influence in determining the appropriate forms of the construct fashioned from each medium. Thus, it is said, a sculpture in terra cotta should have a different sort of angular shape from a sculpture carved in stone or from one cast in metal. Stone is a heavy substance with a structure and physical properties of its own. It is argued that therefore a figure in stone must be adapted

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to the physical properties of stone. If, for example, it resembles a human figure, the limbs and neck must be thicker and more substantial than they are in a figure of flesh and blood for stone is heavier and less flexible than organic matter. Metal again has tensile strength and pliability which should be utilized in metal sculpture; thus if the figure resembles a human figure, the limbs may be more elongated and with greater curvature than is possible to a figure of stone or of flesh and blood. Wood, too, has grain and suggests the living tree and organic growth; hence wood sculpture will have characteristic shape-patterns of its own.

The idea that the physical nature of the medium is one of the factors determining the type of shapes appropriate to the artistic product fashioned from that medium is not to be confused with the crude aesthetic doctrine that the successful exploitation of any medium involves beauty. We speak of 'slick' craftsmanship as the ability to overcome and conceal, rather than to utilize and reveal, the physical qualities and limitations inherent in a medium and since the development of mechanical techniques we tend to assign little importance to it. We admire the patience and the perseverance with which a Chinese family fashions miniature furniture from ivory with only the use of bamboo splinters; but we know that the same result could be produced more rapidly with a dentist's drill and ascribe no aesthetic importance to the achievement. Yet this matter is intimately bound up with the aesthetic importance of craftsmanship, a question which has been very inadequately dealt with by the critics. Whenever one thing is 'represented' in a different material the inherent qualities of the material medium must be to some extent subordinated to the representational purpose for which it is used. There seems little doubt that a craftsman's loving knowledge of his material can contribute effectively to the aesthetic importance of his product. But where to draw the line between the 'slick' craftsmanship which overcomes the inherent limitations of the medium and the skilled manipulation of the medium which seems essential to most great art, is a matter which has not been successfully investigated. There is probably no aesthetic 'rule' governing the extent to which the medium should control the spatial and formal configurations into which it is moulded.

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The observer may be left more or less conscious of the physical qualities of the medium. Only if the nature of the medium is very apparent and the forms into which it is moulded are incongruent with its nature, or if skilled craftsmanship obtrudes to greater prominence than is consistent with the degree of artistic creativeness in formal configuration, in either case we have an aesthetic blemish. The artist is always apt to be more conscious of the medium in which he works than the appreciator and the modern fashion of exaggerating the importance of medium in sculpture may be due largely to the fact that creative artists have recently become more vocal. It seems certain that suitability of medium has more aesthetic importance in most sculpture than in the other arts; but further than this it would not yet be safe to go.

Let us summarize and advance. A work of art, we have sufficiently shown, is a specific organization of sensory material which persists as a possibility for recurrent actualization and is actualized from time to time for this or that observer in particular acts of appreciation. In the case of certain arts—painting, sculpture, architecture and the decorative and industrial arts—the work as a persisting possibility, for a particular arrangement of sense-impressions is ‘embodied’ in a material object which in suitable circumstances causes to an observer the arrangement of sense-impressions which is the work of art. In music, dance and literature, the work is not ‘embodied’ in any material object but it may or may not be ‘recorded’. Before the invention of writing works of literary art were preserved by memory and tradition, as much folk-music is to this day. Nor are there available yet any but the most rudimentary techniques of recording ballet and dance. When a work is recorded, the material recording stands in a less direct relation to the actualized work of art than the material object in which a picture or a sculpture is embodied. You do not actualize a poem or a musical composition by simply gazing at the printed book or score. The music must be performed and the poem read to a competent audience before they are actualized as works of art (in the case of all poems and some musical compositions the performer and the audience may be one and the same person).

Any work of art remains potentiality until some person per-

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ceives the arrangement of aural, visual or combined aural and visual sense-impressions which is that work of art.

In order to study artistic beauty it is therefore first necessary to understand the qualities of visual and aural sensation, for these are the stuff from which works of art are made. Stone and pigment, moving bodies and scraping catgut, are merely the incidental instruments for inducing sensations. It is necessary to understand what is now known as the 'phenomenology' of sensation, to study its qualities and variable characteristics as it is of itself and neither to be concerned with its physical causes nor with its employment as the basis for conceptual thought or practical knowledge of the external world. It is not, of course, necessary to possess a theoretical understanding of sensation in order to appreciate beauty—though it is not true, as is sometimes alleged, that such understanding obstructs appreciation so long at any rate as theoretical understanding is kept in abeyance during the act of appreciation and is not substituted for it. But for the theoretical understanding of beauty and of the appreciation of beauty—that is, for the science of aesthetics—a phenomenological understanding of sensation is not a velleity but the irreplaceable foundation. You can see but you cannot understand a machine unless you know how it is constructed and how it works.

We have shown that the class of aural sensations used in music has the qualities of pitch, volume and *timbre*; visual sensations have the qualities, hue, brilliance, and saturation. These qualities form two triadic groups of independent variables. Every visual sensation must have hue, brilliance and saturation, each in a determinate degree; if any of the three were reduced to zero, there would be no sensation. But each of the three is variable independently of any variation of the others.¹ And the same applies to the aural triad. Every musical sound must have pitch, volume and *timbre* in some determinate degree, although these qualities may vary independently of one another. It is necessary further to understand the elementary sense configurations or patterns which emerge from the interaction of these variable qualities of sensation. From perception of differences among

¹ We here exclude from consideration limitations of the physical medium (pigments, etc.) in which the work is embodied.

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colour areas compresent in one visual field (and these differences may be in respect of any or all the variables hue, brilliance and saturation) emerges perception of shape or form. But we perceive shape by a direct act of immediate or intuitive awareness; we do not construct shape by discursive or logical reason. From perception of the boundary between two shapes emerges by an immediate act of intuitive awareness the perception of line. Certain arrangements of shape and line, when perceived intuitively as single configurations, give rise to three-dimensional sense-impressions, although the physical object which is their cause may or may not be three-dimensional. In music variations of pitch, when not excessive, give rise to 'interval', which is a directly perceived element of aural sensation. We hear an *interval*. We do not construct the interval by discursive judgment as a relation between two isolated sound-sensations. Our awareness of interval is immediate, our judgments *about* interval are based on direct acquaintance *with* interval, and each interval has its characteristic sensory quality as distinct as the sensory quality of *timbre*, which it retains when it is produced with any value of pitch, *timbre*, or volume. There is nothing in visual sensation corresponding to aural interval, as there is nothing in aural sensation corresponding to visual shape. When seen in juxtaposition certain pairs of colours produce a sensory quality usually described by saying that they are 'complimentaries'; other pairs produce a sensation of 'clash'. We speak of colour-harmonies, colour-gradations, colour-steps, of continuous or discontinuous variation of colour; we know of certain obscure relations between the three colour variables, such that certain hues exist only at certain limited ranges of brilliance or saturation. But our direct sensory appreciation of colour relations gives rise to no new element of sensation so concrete as musical interval. You could not compare the interval between determinate hues of yellow and green with the interval between determinate hues of red and purple as you can compare and recognize a fifth or a fourth at any level of pitch. Visual sensation is extended in space and qualitatively different colour patches may be compresent at different positions in a visual field. Conversely, qualitatively different colour patches cannot ever be compresent unless spatially separated in the visual field. Several sounds may, however, be pre-

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sented together and, having no spatial differentiations, yet retain their qualitative distinctness. When several sounds of different pitch are presented together, particularly if they are fairly uniform in volume and *timbre*, a characteristic and peculiar 'double' sensory effect ensues. We hear the several sounds at the same time and are aware of them as distinct sound-sensations. But we also become directly aware of a new sense-impression which is called a chord. Although the constituent sounds of a chord may be heard separately and simultaneously, the chord itself is not for perception a resultant from them but is a new aural characteristic as immediate and individual as shape or *timbre*, which is itself a resultant of inaudible variations of pitch. Nor is the chord a sound-impression lying *between* its component sounds—when we play C and E together on the piano, we do not hear D—but is a qualitatively distinct aural impression. Musical intervals and chords may emerge from simultaneously or successively presented notes. When they are presented successively, they provide the elements from which melody is built. Melody itself is as immediate and direct a sensory configuration as *timbre*, interval or chord; we become aware of it, recognize it and respond to it emotionally, by a direct act of immediate intuition. We do not construct a melody discursively by analysing, comparing and classifying the intervals of which it is composed. We are acquainted *with* a melody before we make judgments *about* it. Music also makes use of an additional sensory quality of *duration*, from which emerges rhythm as melody emerges from interval. And rhythm also enters into the configuration of melody. Rhythm may also occur in visual sensation, as when we watch a pendulum swing or when a light message is transmitted in Morse. Visual rhythm is used in dance but not in the plastic arts of painting, sculpture or architecture. Variations of *timbre* and volume are mainly, though not entirely, used in music for the emphasis of presentational patterns moulded from differentiations of pitch, interval, chord, melody and rhythm.

The difference between the emergent configurational elements of visual and aural sensations is ultimate and fundamental. Compresent visual sensations must be spatially segregated; aural sensations may be compresent and are not spatially distinguished.

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Therefore in aural sensation there is no counterpart of shape, line and dimension; in visual sensation there is no counterpart of interval, chord, harmony, melody, and unless there is sensation of movement there is no visual counterpart of musical rhythm. We all sympathize with the dilemma of the critics and commentators who wrestle with the inadequacy of descriptive aesthetic terminology because it has been nobody's business in particular to investigate the phenomenology of the arts and to create a special vocabulary for them. We realize that it is owing to the poverty of descriptive language that critics delight to apply musical terms, such as harmony, melody, counterpoint, rhythm, or even interval and chord, to the plastic arts and to apply to music such terms as shape, line, or even hue and colour. But while sympathizing with the dilemma we can do no other than insist that such wanton and facile transference of the very few precise descriptive terms which the science of aesthetics owns can only convert the inarticulate into garrulous obscurity.

These then are the main irreducible elements into which works of art can be theoretically analysed. There are others innumerable which are more complex or more difficult to demonstrate because we have no words with which to name them and can only describe them ostensibly by elaborate display of examples—combinations of qualities in music which are vaguely lumped together under such portmanteau terms as harmony, counterpoint, progression, tonality, etc., and in the visual arts the emergent qualities which are intended by such terms as direction, stress, balance, symmetry, etc. Such little work as has been done upon the more recondite aesthetic qualities has consistently failed to keep distinct the phenomenological study of the emergent quality which is immediate and unanalysable in appreciation from the theoretical analysis by discursive reason of its presumptive sensory elements or physical causes. A practical study of beauty would have to go much further than has yet been done into the trackless forest where language provides no compass and no stars shine by night. But as our object here is merely to illustrate sufficiently to enable us to grasp the theoretical principle of beauty in general, we take but one step forward, one peep into the jungle, and then retire to safety.

But at this point it will be objected by the sceptical reader that

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nothing has yet been introduced which directly concerns beauty, nothing which would discriminate a beautiful from an unbeautiful work of art—or as we should prefer to say, a work of art from a construct which unsuccessfully masquerades as a work of art. The sensory elements which have been described are the bricks from which both genuine beauty and bogus art are equally constructed. The point is true and crucial. But the time spent is not time wasted. For we shall argue that beauty itself is simply the extension of that principle of emergent perceptual configuration immediately apprehensible by unreflective intuition to which we have invited attention at the rudimentary levels of sensation.

It has been assumed in passing, and is now asserted, that a work of art is experienced as a single perceptual unity. It is therefore necessarily a coherent perceptual organization of sensory material such that it can become an object of direct intuitional awareness, whether perceptive or imaginal, from which discursive and reflective analysis and judgment are excluded. The point is fundamental, though not easy to explain in general psychological terms because we are dealing with an ultimate of experience which can be made intelligible only to those who have direct experience of it and can no more be described in terms of any other mode of experience than colour can be described to a blind man or musical chords to the deaf. But in saying this I do not intend to adopt that attitude of irritating superiority too often affected by writers on religion and aesthetics who say loftily that those who know what they are talking about will understand them and those who do not can never hope to do so. For, as I shall maintain, the direct intuitional awareness of a complex unity is to some extent common to all experience and to every man. I am not trying to show that the experience of beauty is esoteric and different in its own nature, but the reverse, that it is a fuller development of certain elements which are common to all experience at its most primitive. But these elements cannot be described in terms of the practical and discursive use of perception for the communication of which our languages were designed; they can only be indicated ostensively by pointing to examples from every person's experience.

We will distinguish perceptual awareness as 'synoptic perception' and 'discursive perception' and we will call the former,

which alone is characteristic of the appreciation of beauty, by Coleridge's word 'surview'. There used to be a popular parlour game in which you were shown for some seconds twenty or thirty miscellaneous objects on a tray and then asked to name as many as possible from memory. Some players would rely upon memory of the names of the articles, having memorized as many names as possible during the brief period in which they were presented to view; others, having the power of 'visual memory', would recall the tray with its contents imaginally and name the objects from the visual picture in their minds. In both cases discursive perception is employed. The player isolates, whether in direct perception or in the study of a visual image, a number of discrete items against the background of a visual field and transfers his attention rapidly but discretely from one item to another. He may also be aware of relations—*behind* the egg-cup a baby's shoe, *to the left* of the toothbrush a box of matches, *beneath* the radish a queen of spades; or he may classify by colours, as three red things, two blue things, and so on. But awareness of these relations is made up of a number of discrete acts of discursive perception; there is no seeing together the whole field as a single unity, no *surview*. If half a dozen objects are removed from the tray no unified pattern is destroyed but the exercise simply becomes easier. In contrast to this the literature of 'gestalt' or 'configurational' psychology has made us amply familiar with the importance of organic pattern or configuration in perception and cognition. As a very simple illustration of such configuration look at the face of a die which represents the number five. When you look at this arrangement of dots, the five-pattern is seen with immediacy and is an ultimate for sensation. It is not the case that you have five separate sensations of five dots, other sensations of spatial and directional relations between them and from these build up a pattern in sensation. The apprehension of the 'five-pattern' is direct and immediate; analysis is secondary. Now draw a five-pattern on a piece of notepaper, add a blue circle some distance above it and a red cross elsewhere on the paper. By discursive reflection you will be able to discover very many relations of size, colour, distance and direction among these three figures; but you will not be able to see them with immediacy as a single pattern.

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By these examples I hope to have illustrated the difference between synoptic perception of a complex unity on the one hand and discursive perception of an inchoate field of varied items on the other. In the former case the sensory material enters awareness with immediacy as a single configurational element; it is analysed into constituent items and relations only subsequently by discursive reflection and the artificial parcellation of attention. In the second case there is no unity for direct perception but only reflective connections between discrete perceptions. It is our contention that the faculty of apprehending configurations with immediacy in direct intuitional awareness, the synoptic faculty, may be extended almost indefinitely, as when we recall for appreciation a whole musical composition, a novel or an epic. When a complex whole enters awareness with immediacy, the details are not lost or blurred but are present to consciousness fused and integral with the whole. As Santayana said in the passage previously quoted, the power to grasp a rich and intricate complex as a unity and a single whole varies from person to person. There are perhaps few people who can achieve awareness of a symphony as a single whole without sacrificing much of its detail and complexity and without contemplating it discretely bit by bit. The same is true of a novel, a poem or a picture. But this is the faculty which is cultivated and expanded in the exercise of appreciation of beauty. An arrangement of sensory material such that it can be observed as a single unity in direct intuition I shall call an 'organic whole' and I shall define an organic whole as a configuration such that the configuration itself is prior in awareness to its component parts and is not explicable by a summation of its parts and their relations according to discursive and additive principles. The parts are what they are in virtue of the configurational whole of which they are parts, not the whole as a result of the summation of the parts. As will be evident shortly, this determination of the parts by the whole of which they are a part is meant literally and not merely in a figurative or logical sense. And when any such organic whole enters into awareness, there emerges a new element or quality of perception which could no more be imagined or deduced from the consideration of its parts in isolation than the sensation of shape could be deduced from a consideration of the

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colour-qualities hue, brilliance and saturation or melody deduced from consideration of pitch, volume and *timbre*. A work of art is a successful work of art in so far as it achieves an organization of perceptual material into a single organic whole from which emerges a new and unique perceptual quality in awareness. In so far as it falls into two or more discrete sections not organically connected in experience but related only discursively, it fails as a work of art. As, therefore, beauty was defined as the characteristic excellence of a work of art, we may now describe it more concretely as the property of being an organic unity to perception, for this property is the measure of the extent to which any arrangement of sensory material succeeds in becoming a work of art.

There is nothing very mysterious about all this, although it is apt to be strange to those who are accustomed to think of visual and aural perception only as a practical device for coming to terms with the external world. But the process of 'synoptic perception' is apparent at the most elementary and rudimentary stages of experience. You only get shape when two coloured expanses are 'seen together' in one visual field. If you concentrate your whole attention within one or the other expanse so that either occupies the whole visual field to the exclusion of the other, you see no shape. You only get musical interval when two musical notes are together in awareness. And when sensory elements are combined together in higher and more complex configurations, they must be capable of being perceived together in *surview* if they are to have beauty. You may compare two melodies discursively—one is light and gay, the other sad; one uses large ascending jumps and is in the major key, while the other is in a minor key and is composed of smaller and mainly descending intervals. Innumerable and very intricate such reflective and analytic comparisons may be made. But the two melodies can only enter awareness together as a single perceptual configuration if they are so combined by an artist. And when this happens a new and individual quality is experienced, with new interplay of rhythms, intervals and counterpoint, which could not be deduced analytically by discursive consideration of the two melodies in separation. In the degree to which this unification occurs beauty is created for experience.

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Hence the view which I wish to propose in this study—I do not think it is a view which can be directly proved, but I think it is the only notion of beauty which cannot be shown to be either false or nugatory—is that the beautiful is the organization of perceptual material into an organic whole by the artist. And it will follow that the degree of beauty manifested by any work of art will be a resultant of two factors: (a) the richness, complexity or subtlety of the configurational organization; and (b) the completeness or compactness of the organization for experience.

Before concluding this chapter I wish to draw three corollaries from the foregoing understanding of the proper nature of a work of art and of artistic beauty. The second will round off the logical argument of previous chapters and the first and third will lead on towards the discussion to come.

1. The view of beauty which has been advocated emphasizes the cognitive character of appreciation, distinguishing it from discursive and analytical judgment but classifying it with the varieties of direct intuition from simple sensation upwards by which impressions are presented to awareness. Emotional reaction is awarded a secondary place. This too seems justified. We do not contemplate the arts in order to experience emotions, although incidentally emotion may be aroused. We do not listen to music for the sake of emotion but in order to hear and know it; we do not look at pictures for emotional stimulation but for the sake of seeing them. As Dürer said: 'This art of painting is made for the eyes,' Obvious perhaps, but new to aesthetics.

In practical life the sensations of sight and hearing function at a rudimentary level for the recognition and manipulation of external things in the service of the gustatory, tactile and somatic senses. We do not 'perceive together' complex organizations of sight or sound but reflectively and discursively combine a large number of isolated percepts for practical ends. Aesthetic appreciation gives play to the synoptic function of visual and aural awareness, extending its capacity to the full and beyond. The *value* we assign to beauty derives from its power to awaken and exercise our dormant capacities of awareness.

2. This understanding of the proper nature of a work of art

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and of what beauty is affords added reason to prefer the aesthetic judgments of trained and naturally sensitive critics over the judgments of the inexperienced and obtuse. The trained and sensitive observer actualizes a work of art more perfectly than the untrained and untalented and the two are judging about different things because different arrangements of sensory material enter into the awareness of each. It has long been a commonplace of advanced literary criticism that of all the people who read any one poem (specific arrangement of words) no two ever become sensible of exactly the same poem (specific arrangement of meanings). In his two books, *Principles of Literary Criticism* and *Practical Criticism*, Mr. I. A. Richards has performed a valuable service to both literary criticism and aesthetics by his analyses of the true nature of a work of literary art and of the processes by which it is apprehended. A poem is an ordered arrangement of words, the full meaning of which arises not only from their grammatical and logical structure but also from the associations, conscious and subconscious, aroused by each word or phrase in the mind of the reader. And while the grammatical and logical meaning *may* be more or less uniform, the associative meanings—which make the poem what it is—differ from reader to reader and differ for the same reader on each occasion of reading. A musical composition is not merely a set of simultaneous and consecutive sounds which are the same for every hearer. It is a set of sounds ordered into concentric and interrelated groups, which, in turn are ordered into other concentric and interrelated groups, culminating in the one inclusive group which is the composition. The unique character of the composition consists precisely in this convergent system of ordered relations, and is apprehended in very different degrees by different listeners. The same principle holds with pictures and statues. Although a number of people may be looking at the same picture (material object of paint on canvas), it is unlikely, if the work is beautiful and complex, that any two will see exactly the same work of art. The trained observer sees things which the untrained observer does not see at all. This is not a manner of speaking but the simple truth. The visual sensations of two people who are looking at 'the same' picture may be as different as those of two people looking at different material objects. A few simple experiments

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would prove this to the most sceptical. There are untrained observers who are unable to see 'picture-space' at all in a painting by Cézanne. Many people have low initial sensitivity to differences of colour and still many more are insensible to the quality of shapes in themselves. To all such people the appreciation of the system of relations which constitutes the uniqueness and character of any great painting is an impossibility. In most people the capacity to grasp wealth and complexity of detail in a single act of synoptic awareness is very limited indeed. Practice is necessary even with those who are trained.

The differences between what is seen by the trained and gifted observer and what is seen by the untrained observer are not haphazard. The trained observer sees what the untrained observer does not see, but what he sees is not invented or created in some way by himself. He sees only what is there for him to see. The cultivation of appreciation is largely the training of observation in order that one may be enabled to see with more and more accuracy and fullness what is there to be seen. The process is almost infinite, or at least demands more than the normal human lifetime to perfect. For the observation in question is synthetic not discursive. The trained observer sees not a set of isolated relations between parts, but sets of relations which are themselves interrelated by ever higher relations in a complex unity, and the final appreciation demands a surview, or 'seeing together', of the whole. I remember Mr. Mark Gertler once surprising a number of students by telling them that the training demanded for just appreciation of painting is as intense and as long as the training necessary for a creative artist.

If all this is granted—and it will be made more evident when we come to examine the process of appreciation in detail—there can be no genuine discrepancy between the judgments of persons at different levels in the development of the faculty of aesthetic perception. Although their judgments are contrary they can never be contradictory, for they will always be judging unlike sets of sense-impressions and genuinely contradictory judgments must be about the same thing.

I would argue from this that there is no obvious reason from the discrepancy of beauty judgments why a science of aesthetics should not be possible. Professor Dingle once defined science as

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'the recording, augmentation and rational correlation of those elements of our experience which are common, or potentially common, to all normal people'. He later discarded this definition out of regard for philosophical difficulties involved in the idea of 'normal'. The capacity for developed aesthetic experience is certainly not very common among men to-day. We may believe with Alexis Carrel that 'aesthetic sense exists in the most primitive human beings as in the most civilized', and that it 'remains potential in most individuals because industrial civilization has surrounded them with coarse, vulgar, and ugly sights'. We may say that like mystical experience and telepathic awareness aesthetic appreciation is a 'normal, although rare, activity of the human being'.¹ But in any sense in which metaphysical or mystical phenomena can be treated scientifically, as few would now deny that they can, so the manifestations of aesthetic consciousness do not lie outside the scope of science.

3. I think it follows from the nature of a work of art and of artistic beauty that beauty cannot be measured mechanically even in the arts of painting and music where measurement of the physical medium is relatively feasible. I do not mean by this that it is very difficult to measure very accurately, but that such measurement is intrinsically impossible. And by this I mean that if we achieve ideally accurate and complete measurements of a physical picture or of the sensory field of a man who was aesthetically aware of the picture, we should not have measured the beauty of the picture.

Measurement of the physical medium does not serve, however exact, because there is not a one-one relation between physical stimulus and received impression. If you look at a uniformly coloured piece of orange paper lying between a red paper on the left and a yellow paper on the right, your orange impression will not be uniformly coloured over the whole expanse but will be yellower towards the left and redder towards the right. If you concentrate your attention away from the red paper and look only at the orange and yellow papers, the 'yellowing' towards the left of the orange paper will disappear although the measurable properties of the physical vehicle are unchanged. In Fig. 1 the left-hand segment of the horizontal line at A appears shorter

¹ *Man, the Unknown*, Alexis Carrel.

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than the segment on the right, although if you measure the physical medium, the two are equal. The division of the horizontal line in B appears to divide it into two unequal segments, although measurement of the physical medium will reveal the two segments equal. Not the most subtle mathematical measurement of sound-waves will indicate when three simultaneous musical notes will be heard 'vertically' as a chord or 'horizontally' as elements in three simultaneous contrapuntal melodic sequences. I think that no mathematical measurement of sound-

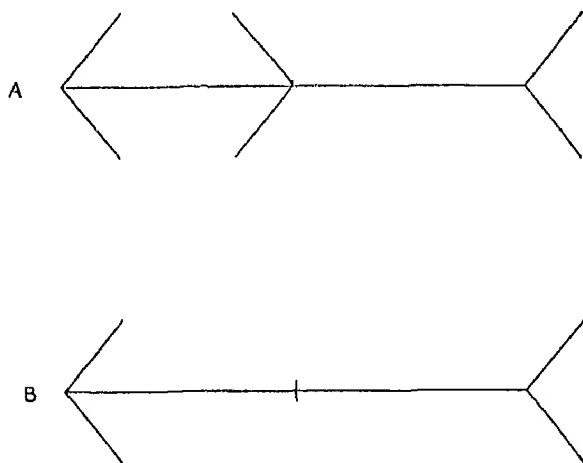


FIGURE 1

waves will show a difference between sets of successive notes which are heard as melodic configurations and sets which are heard as chaotic and unorganized groups. The 'emergent' qualities of sensation cannot be predicted by measurement of the qualities from whose synoptic awareness they emerge. And there are 'radiations' or 'influences' among sensations held synoptically in awareness together which are not measured in the physical measurements of the medium and which cannot be discounted in making these measurements.

Nor is measurement of the actual sensory material in any better case. Instead of measuring the physical qualities of the coloured paper which induces an orange sensation you may mea-

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sure your sensation itself. To do this, you must concentrate your attention upon it and compare it with the sensation induced by an external 'colour-wheel' until the two seem identical of hue. But by concentrating attention within the orange expanse you have changed it from the sensation you had when it was seen synoptically between a red and a yellow expanse. It is now a sensation uniformly orange; it was before a sensation grading from yellow-orange to red-orange. Even the introduction of the colour-wheel into your visual field inevitably alters the character of every element in the field. If you wish to measure the colour sensations experienced when appreciating a picture, you can only do so by splitting them up into a large number of artificially isolated items. You measure the blue of the sky by artificially isolating a patch of blue; you measure the red of the cloak by isolating it from the rest of the picture. And by so isolating you change them. Each constituent element of the total visual sensation you experience when appreciating a picture is specifically what it is only by reason of all the relations in which it stands to the rest. You cannot take it out of the whole and leave it as it was. And this applies equally to shape, line, direction, the three variables of colour and all the emergent qualities of sensation. This is what is meant by saying that an organic whole is not a summation of discrete parts but the parts are what they are only as they stand in that particular whole. The parts are determined by the whole. If you try to measure the whole as a sum of relations between discrete parts, you have not only changed the character of the whole but you have changed every part and relation. And this change is as 'real' as the change of sensation when red light is switched to blue.

For this reason I do not believe that psychometric studies in aesthetics have a very valuable contribution to make to the study of beauty.

Chapter VI

DESCRIPTION OF APPRECIATION

WE use the term 'appreciation' throughout in a special sense as a synonym of the ugly phrase 'aesthetic awareness'. Other synonyms no more fetching are 'aesthetic contemplation' and 'enjoyment of beauty'. As we use it, 'appreciation' names the act of consciousness in which we are aware of a work of art as a work of art, not by inference from recollection of an earlier judgment about it but by direct acquaintance with it. In the language of the previous chapter, 'appreciation' is the actualization of a work of art for ourselves. In this usage the denotation of the verb 'appreciate' is narrower than the dictionary definition 'to be fully sensible of all the good qualities in the thing judged', for we apply it only to things of beauty. We say that we are appreciating a work of art when it enters fully into our awareness or is completely actualized for us; and when this happens, we are fully sensible of its characteristic excellence or beauty. For, as has been shown, to be fully aware of a work of art is to be sensible of its beauty and the two things cannot be severed. Finally, as we use it, the word 'appreciation' does not carry the connotation of judgment. A judgment about beauty may arise in consequence of an act of appreciation, but appreciation itself is a mode of awareness and not a form of judgment.

In the attempt to anatomize appreciation it will be necessary to assume that the reader has some acquaintance with appreciation in his own experience. If this is not the case, what is said will, I think, be intelligible, but will almost certainly seem unreal.

That the attitude taken up in aesthetic contemplation is in some way different from the mental attitudes of daily life has long been believed and it will perhaps not seriously be doubted that the appreciation of beauty demands special habits of atten-

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tion and not merely greater but a different kind of sensitiveness and acuity from that which we find useful for the practical affairs of life. Two men who look at the same picture may see two different pictures and two men reading the same poem may realize two different poems. If the picture and the poem are good, one man in each case may appreciate a work of art and the other may not. Yet the man who fails may have better eyesight and keener understanding than the one who succeeds. Erroneous perception of beauty is far more serious and more prevalent than mistakes in the practical perceptions by which we direct our actions and beliefs. Once you are fairly familiar with the world around you, you do not easily mistake a bull for a sheep dog or an aeroplane for a bus; but it is not difficult to mistake a beautiful picture for meaningless daub or to become conditioned so as to experience emotional pleasure in worthless musical or pictorial atrocities. The powers of perception and understanding which make for success in practical life do not necessarily lead to success in the search for beauty and the man who is most sensitive to beauty is not the best endowed to succeed in life. Hence we may assume that the appreciation of beauty requires other capacities and habits from those which are fostered by the forum and the mart. But the element of difference, the special features of appreciation, have generally been sought by writers on aesthetics in the context of a pre-determined theory of beauty, from Aristotle, who, believing that the essence of art is imitation, thought that appreciation consists in the intellectual pleasure of classification inherent in all recognition,¹ to Richards who, having committed himself to the theory that beauty is nothing more than subjective emotional response, would persuade us that appreciation is a fictitious state of equilibrium among subliminal and non-introspectible impulses and emotions.

¹ 'We take pleasure in looking at the most carefully executed pictures of things which in themselves we dislike to look at, such as the forms of the most ignoble animals, or of corpses. And there is this cause, that not only men of science enjoy the exercise of apprehension, but the rest of mankind enjoy it too; only their capacity for it is limited. So this is why they enjoy seeing the likeness of things, because it is an incident of seeing them that they apprehend and infer what each thing is, as for instance "This is he"; for if the spectator has never seen the thing before it will not be the imitation which will cause the pleasure but the execution or the colour or some such reason.' *Poetics*.

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We shall start from the undoubted fact that appreciation involves a special attitude of awareness—that this is so, we have seen from the study of the nature of a work of art—and shall see where this leads us. We shall regard the emotional content of appreciation as secondary, first because no one has yet succeeded in demonstrating an emotion which is specific to the awareness of beauty and second because emotional response presupposes awareness. If a thing has not entered into your awareness, you cannot be emotionally affected by it. And if you are incorrectly or imperfectly aware of a work of art, your emotion will not be stimulated by the work of art or its beauty but by the imperfect resemblance to it in the presentation of which you are aware.

1. *Detachment*

We start with a characteristic of the aesthetic attitude of mind which has frequently been mentioned in the past, the characteristic of *detachment* or *disinterestedness*.¹

Visual and aural sensations have practical meaning beyond themselves and in ordinary everyday life we value them and attend to them for their practical significance rather than for themselves. They are our main signposts to that world of external things and causality by which we adjust our lives. Whenever we experience visual or aural sensations, motor and muscular expectations are called into being below the level of consciousness and we unconsciously select for attention just those elements which have practical significance for future behaviour. We project our visual sensations as qualities of things in an external space outside ourselves; our aural sensations are not projected but we regard them as caused by the world of external things. And the very concepts of outside space and external things are elaborately built up through implicit references to muscular activity. We rarely look or listen at all except in view of future activity. We are aware not of our own sensations but of a world of external objects from which our sensations derive. A man does not say that he is aware in his visual field of a brown patch of

¹ A good presentation of this characteristic of appreciation will be found in Chapters V and VI of Charles Mauron's *Aesthetics and Psychology*, although some of the conclusions he draws from it are not sound.

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three-dimensional partly transparent and partly lustrous colour which has a specific shape and size, is fairly highly saturated and has specific brilliance. He says that he sees a glass of beer. And this statement means that his visual sensation is a signpost to a complicated sequence of possible future activity of moving towards, gripping, and consuming, which he expects to be conducive to pleasant physiological results. If you ask anyone what he hears, he does not describe aural sensations but says: 'I hear a bell ringing' or 'I hear a cow lowing'. The practical significance of gustatory sensations is not so obtrusive. We do not utilize them as indications of vitamin or calcium content of the food consumed but savour them in themselves as sensations.

The process of recognizing things in the external world is a process of classification based upon unconscious and habitual selection of those elements of visual and aural sensations which have significance for behaviour. We attend only to the selected elements and only these penetrate into awareness. We use our sensations as 'clues' to the external world in which we are interested and it is a psychological principle that as we become conscious of the meaning of clues, our consciousness of the clues themselves grows faint. It is almost impossible for a normal man without previous training to see the picture presented to him by his eyes. We are aware of an objective situation and not of the retinal image which was our clue to that situation. Although our brown rectangular patch is a symbol of all the qualities and expectancies which we associate with the thing we name a glass of beer, most people are incapable of recording the exact shade of brown they had seen if asked to do so while it was before their eyes. In order to describe the visual sensation as such they would have to re-focus attention in a different way upon it. This is because the brown patch has interest only as a symbol and attention to it lapsed as soon as it had served its purpose as a symbol. The specific colour qualities of hue, saturation and brilliance failed to 'register'. When we recognize a thing in a practical way it becomes for us an instance of a class, a particular case of the occurrence of a group of qualities which frequently occur together in experience, and the sense impression by which we become aware of the thing is merely a sign of the presence of

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this instance.¹ Visual sensations ordinarily register very faintly in consciousness and auditory sensations only a little less so. Grass is green—and it is usually enough to classify an experienced green expanse as 'green—grass'. If you settle to enjoy the 'beauty' of the green field, noticing the play of light and shade and the subtle changes and contrasts of hue, you are at once conscious that you have taken up an attitude of attention different from the normal attitude of life. Ordinarily we are aware of an external world of things in which our interests lie and we are not aware of our own sensations. Sometimes, on rare occasions, when you first wake up in the morning, when you look out over the countryside while lying upside-down on a mountain-side, or when you are under the influence of drugs, you may succeed in repressing awareness of an external world and the retinal image may flood in upon your awareness in all its beauty as a full field of shaped colours. Such an experience, however fleeting, brings with it a startling shock of strangeness, as though you had entered a foreign world.

We are most apt to attend to a sensation rather than to its significance as a clue either when it is strange and its practical meaning is not understood or when its meaning has been understood to be remote from practical life. We nowadays eat in order to anticipate not in order to satisfy hunger and therefore tend to pay greater attention to the intrinsic qualities of gustatory sensations. But 'to a hungry man all food tastes good', or rather the process of eating is pleasurable without reference to taste when one is hungry. We attend to smells because they have little practical significance in our lives as 'clues' to an objective world. We are disposed to attend more readily to the colours of flowers because we regard them as essentially decorative and without practical importance. Many sounds have practical significance—the drone of an aeroplane, the ringing of the telephone, a cry of distress. But many more are without definite or precise practical implications and for this reason we are more ready to attend to sounds and savour their individual nature in sensation than to

¹ 'In general the individual gives no account of the colour he has just seen. He never makes colour an object of special consideration, but uses it rather as a sign by the aid of which objects are recognized.' E. Hering, *Zur Lehre vom Lichtsinn* (quoted by David Katz, *The World of Colour*).

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colours or shapes. We listen to the singing of birds as we enjoy the colours of flowers because we regard birds as mildly decorative and impractical. We are almost never aware of the sounds of speech because our interest is in its meaning. Because the sounds of music are a class apart from the sounds we are most accustomed to hear in ordinary life we find it easier to listen to musical sounds than to see the colours of a picture. But it is possible to savour visual sensations as we savour the bouquet of a wine, as the Chinese savour jade. When in this way you withdraw attention from significance and begin to attend to the inner quality of your sensations themselves, when you see the picture which your eyes present and hear the sounds never noticed before, you have made a first step towards the aesthetic attitude of appreciation.

In aesthetic appreciation we do not utilize sense impressions as signposts for future activity or as symbols of things in an external world, but we contemplate them—that is, indulge and intensify our awareness of them—for their own sake alone. The aesthetic activity is complete in itself. We observe for the sake of observing not in the interests of future behaviour. The difference of mental attitude from ordinary practical awareness is fundamental. It involves jettisoning the presuppositions and unconscious expectancies which accompany all practical perception, and for this reason it is often felt to be an intermission in the normal flow of living, a quiescence, or a transference into a different realm of being. But it is not quiescence. In that it is not controlled by the practical expectancies of perception it is an intermission in the normal flow of living; but it is an exceptionally vigorous and vital intensification of awareness channelled in one particular direction. It is quite distinct from the heightened acuteness of perception which results from scientific curiosity. The scientific attitude of mind is a development of the practical orientation, and scientific curiosity is curiosity about the external implications of our sensations. The scientist uses sensations as signs and labels of the world of external things and has reduced this habit to a technique. In aesthetic appreciation the material of awareness is isolated in consciousness and the attention is wholly focused upon it. It is not a cause or an effect or an instance of a class but individual and unique. Every presentation and every

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subject of awareness is in fact individual and unique; but practical life and science thrust this uniqueness aside and attend to only so much of the presentation as is common and repeatable. For only this aspect of it is significant for classification and recognition. When we classify a picture as a water-colour or a landscape, a portrait of Miss X or a mountain scene in Wales, we are not contemplating it aesthetically. In aesthetic appreciation we look at a picture in order to see it as an individual, not in order to classify it or interpret its meaning. If someone asks you what a picture by Paul Klee *means*, he is not looking at it in order to see it and probably has not the capacity to see the familiar pictures of the National Gallery which he thinks he can interpret. In order to appreciate you must first see. We listen to music in order to hear it. We read a poem in order to apprehend it intuitively—not in order to theorize, to be instructed or to be morally uplifted or moved.

Most or all people are accustomed intermittently and in some degree to attend to some sensations for their own sakes, to savour them instead of using them as clues. When this happens they indulge and increase awareness of the intrinsic quality of the sensation. Awareness is increased by being focused and canalized. In so far as it goes, this is a first step, but a first step only, towards appreciation of beauty. But it is, I think, recognition of the non-practical orientation of this attitude which characterizes all genuine appreciation that has lent plausibility to the doctrine that aesthetic enjoyment is a mode of *play*.

The doctrine that aesthetic activity is a form of play is first, I believe, found in Home (1696–1782), was held in a special sense by Schiller,¹ and was developed in a psychological and sociological sense by Herbert Spencer and Groos.

Schiller uses the word 'play' (*Spiel*) with a sense peculiar to aesthetics and inapplicable in any other sphere. 'Man must only play with beauty and he must play with beauty only.' In its simplest form he holds that the play-impulse is the mere discharge of accumulated energy; as such it is analogous to what is normally meant by the play and gambolling of young children and animals. A higher phase comes into being when a person is

¹ *Briefe über die ästhetische Erziehung des Menschen.*

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aroused to the pleasure of sensation for its own sake.¹ This is, we think, an important anticipation of a fundamental characteristic of the aesthetic attitude of mind—the activation of the perceptive faculty for its own sake. At a still more complicated level he held that the play-impulse is the equipoise resulting from a harmonious activation of two opposing impulses of the human mind, the sense-impulse, the proper object of which is *life*, and the rational *form*-impulse, the proper object of which is form. This idea of the aesthetic attitude as a balance, harmony or equipoise of conflicting impulses leads in a false direction frequently favoured by those who approach aesthetics with a literary bias. We shall be concerned to maintain that *form* is an immediate datum of perception and not a conceptual construct from sensation.

If the doctrine has any value at all in the hands of the writers who mean by 'play' what we ordinarily mean by that word, it must be valuable either as an analogy or as a classification. There are admittedly many kinds of play which have nothing to do with aesthetics or beauty. Hence if the appreciation of beauty is play, it is a special type of a wider class of activity, and it is necessary to indicate (1) the characteristics which it shares in common with the other types of play and (2) the differentia by which it is distinguished from them.

There are the following main types of play in the ordinary meaning of the word 'play'. (1) The purposeless gambolling of children and young animals, which may be biologically useful as tentative bodily experimentation, is often imitative, but is unregulated and uncontrolled. (2) *Games* differ from gambolling in that activity is controlled by rules and directed to an end. They encourage the development and exploitation of skilled ability and effort is usually, though not always, stimulated by the introduction of rivalry and competition. There are two class of games,

¹ *Brief*, 26. Schiller was influenced by Immanuel Kant's criterion of 'disinterested pleasure', which, followed by Schopenhauer, he re-defined as 'the freedom of valuation from wish and will'. Like Kant, Schiller regarded the sensuous and the moral impulses as an original duality in our nature and he found in the play impulse a reconciliation of the original antagonism between them. Hence aesthetic enjoyment is the adjustment of the duality in human nature, art is peculiar to man and in it man alone reconciles the fundamental antithesis of reality.

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physical and intellectual. Both classes (e.g. billiards and chess) invite the development and activation of a skilled ability. (3) Finally, in a separate class, I place games of chance. Their classification is difficult. They do not invite the activation of ability and are not essentially competitive. They seem to be a response to a separate impulse connected with the primitive racial superstitions and have little in common with other forms of play and nothing in common with aesthetics.

Aesthetic appreciation has in common with games other than games of chance the characteristic of 'disinterestedness'. It is the activation of a skilled faculty for no ulterior purpose but for the enjoyment of the exercise of that faculty. But it has this characteristic in common also with science, philosophy and religious worship. The quality of disinterestedness belongs to every form of activity which is indulged and valued for its own sake and not as a means to something else. This characteristic is not sufficient, therefore, to warrant our classifying artistic production and appreciation as play unless we include all intrinsically valuable activities as play.

The only writer I have found to express a precise theory of the differentia which discriminate aesthetic activity from other forms of activity classified as 'play' is Grant Allen. Grant Allen suggests that play (the playing of games) is the disinterested exercise of active functions and that aesthetic appreciation is the disinterested exercise of receptive functions. This distinction is clearly inadequate in that it leaves no room for the function of the creative artist, which cannot be called receptive. But its phrasing indicates a more serious misconception. The contrasting of 'active' and 'receptive' shows that 'receptive' is held synonymous with 'passive'. Here lurks a most virulent error. Aesthetic appreciation is receptive and purely receptive. This is an important characteristic whose investigation will carry us a long way towards understanding the nature of beauty. But receptivity is not passivity. The mind is at its most active when it is most receptive. The faculty of sensation or intuition is alert; the attention is concentrated; habits of skilled awareness must be made to function; the mind becomes at once a detecting instrument and the receiver of something too large for itself. Intense receptivity is a strenuous matter. 'The common man does not linger in mere

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perception; he seeks a concept as a lazy man does a chair, and assigns to it the perception, which interests him no more.' Genuine appreciation of any considerable work of art, especially of any considerable work of musical art, is a very fatiguing form of mental activity.¹

We have grown mentally lazy. We work in order to obtain leisure and then we seek entertainment in order to render leisure more tolerable. Most people to-day read when there is nothing better to do and go to the cinemas in preference to the art galleries. They demand of their books 'entertainment value'. Our literature must hold attention sufficient only to render the reader unaware of his boredom but must not demand effort of attention. This mental passivity is the antithesis of the aesthetic attitude. Great books and pictures demand great effort; they are to be read or seen again and again, always with increasing realization. A modern book is made to be read once and returned to the library. A magazine feature has served its purpose when the magazine is cast aside. I can see nothing in common between this sort of 'amusement' and genuine aesthetic activity.

2. *Impersonality*

In ordinary waking life we tend to 'project' our visual and auditory sensations outside ourselves as qualities of external 'things' (visual sensations) or as non-attached external sensations caused by things (auditory sensations). Visceral and somatic sensations tend to be localized inside ourselves and to be regarded as states or qualities of ourselves. Our attitudes to olfactory, gustatory and tactual sensations waver less clearly defined between these two extremes. When visual sensations are projected outside ourselves, they—and to a smaller degree auditory sensations also—are localized in what is called a 'common space'

¹ I would therefore reject the conception of beauty which was a commonplace fifty years ago when it was defined in terms of mental comfort or placidity. A typical example may be found in Owen Jones's *Grammar of Ornament*. His third proposition runs: 'As Architecture, so all works of the Decorative Arts, should possess fitness, proportion, harmony, the result of all which is repose.' And he follows it with: 'True beauty results from that repose which the mind feels when the eye, the intellect, and the affections are satisfied from the absence of any want.' For 'repose' we would not substitute 'restlessness' with some moderns, but complete engagement in a fully vital activity.

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outside the body of the observer. This 'common space' is (for logical analysis) a complicated construct composed of local and positional relations of discriminated portions of the whole visual field combined with subliminal or incipient tactual, kinetic and somatic sensations, and when a sensation is projected within this common external space it is also defined with regard to its location and distance in relation to the body of the observer. The localization of auditory sensations in external space is less automatic and less exact than that of visual sensations.

We are not directly and continuously conscious of external space. We are conscious of particular sensations, or more usually of sensation-complexes regarded as 'things', *in* space. We are conscious of external space in the practical sense that we are conditioned to alertness towards it and always ready to localize within it any external sensation. A sportsman may be but dimly conscious of the natural scenes around him: his attention is concentrated upon internal sensations symptomatic of indigestion or he is thinking of problems with which he will have to cope in his office after the week-end. But he is sensitized to alertness towards certain stimuli. He hears a whirring noise; his attention is focused upon a rising bird. As he brings up his gun and consciousness is concentrated more keenly upon the flying bird, his former preoccupations recede and the visual sensations of green grass, brown trees and blue sky become a poorly differentiated blur in the background of awareness. Yet the position of the bird in external space and its spatial relations to his body are very clearly defined.

There are, however, some artificial orientations of attention when consciousness is wholly abstracted from alertness to a common external space.¹ The most familiar example is the orien-

¹ An important part in building up our consciousness of external space is played by the 'proprioceptive sense' which is defined as the sense of the passive position and movement of our body in space. It comes from the muscles and joints of the body itself, helped by a special 'balancing' organ in the bone behind the ears. In normal waking consciousness it is perpetually with us. But when we go to the cinema, become engrossed in a book or indulge in aesthetic contemplation, this sense is partially or wholly suspended. We are no longer conscious of our body's position in space and any co-ordinated bodily movement requires an abrupt interruption in the direction of our concentration.

Our sense of the distance of various portions of the visual field from each

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tation of attention at a cinema performance. On first taking your seat in the cinema you are aware of the screen at a certain distance from you, of your neighbours before and behind and of attendants moving in the obscurity. But as soon as attention is concentrated upon the screen you cease to be aware of anything but the screen. Visual sensations are discriminated within the new 'screen-space' and are localized within this screen-space in relation to each other. Awareness of your own bodily position recedes and you discriminate local relations within the artificially limited visual field without assigning to them a common spacial relation to your own body. A similar thing happens when you concentrate upon a football match and cease to be aware of the spectators in your vicinity. The experience of concentrating upon a picture or a sculpture is similar.¹ And when we focus attention upon a musical composition the sounds we hear are no longer projected outside ourselves; when we become engrossed in a book we are 'lost' to what goes on around us. When this occurs *projection* does not take place. It is no more true to say that 'picture-space' or 'screen-space' is outside you than that it is in your head.² Indeed it is not uncommon to say that you 'project yourself' into the screen or picture, though this sort of language is generally used with an emotional rather than a sensory reference.

other and from ourselves is normally due to the automatic focusing of the eye lenses called 'accommodation' combined with the 'parallactic movement' within the visual field when the direction of vision is changed. The illusion of depth in the Disney animated cartoons is produced by artificial reproduction of parallactic movement. Our sense of perspective is further enhanced by stereopsis or the superimposition of two fields of vision from the two eyes. When we attend the cinema or aesthetically contemplate a picture, both accommodation and the sense of parallactic movement are in abeyance. We become aware of a new and independent 'picture-space' in which perspective or relative depth is caused by the artificial reproduction stereopsis.

¹ This concentration of attention upon a limited portion of the sensory field is not easy for all people. The function of a frame is to facilitate attention to the picture within the frame, but some people find such concentration difficult without the aid of darkness and light given by the cinema or stage. *Interest* in the selected sensory field is essential to successful concentration upon it.

² Picture-space is a characteristic of a part of the visual field which, by the concentration of attention upon it, has become the whole field and which is no longer related to the bodily position of the observer.

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The *isolation of the aesthetic object in consciousness* has been noticed by a number of writers who try to explain appreciation in terms of dream, reverie or hypnosis. It is a view which is well put forward by J. A. Stewart in the second part of his *Plato's Doctrine of Ideas*, although much of his elaboration is incorrect and his metaphysical conclusions irrelevant.¹ Stewart maintains that an object becomes beautiful in so far as it is 'framed apart by itself' for 'contemplation' and that 'concentration on an object framed apart by itself is the dream-state'. The following is his description of this attitude of attention: 'Each image, or little group of images, stands for a while by itself framed in the diminutive spot of light to which consciousness has been reduced; and over against it the dreamer stands as mere spectator, all eye for the one engrossing object, the sensory-motor reactions by which he actively meets the countless stimuli of the waking-state all arrested.'² From the description given above, however, it is clear that this focusing of attention and limiting of consciousness, although characteristic of aesthetic contemplation in contrast with the attitudes of practical waking life, is not peculiar to aesthetic contemplation. Whether you call it dream, reverie or something else, it is also characteristic of the attitude of mind taken up by the audience at a cinema or the interested spectators of a football match. It is equally present when one reads a bad and a good novel if one can become equally engrossed in both.

The attitude of *detachment* means that we abstract from the practical content of ordinary perception. The attitude of *impersonality* means that we no longer relate the subject of awareness to that consciousness of self which is an undercurrent of all practical awareness. Both are necessary to aesthetic orientation, but they are not sufficient to discriminate appreciation from all other attitudes of awareness.

3. Receptivity

There are three types of attention, voluntary, conditioned and coerced attention. Voluntary attention is familiar and involves

¹ His view was approved by McDougall, *An Outline of Psychology*, p. 376, note. See also R. Hamann, *Aesthetik* (1911) and S. S. Langfeld, *The Aesthetic Attitude* (1920), pp. 48 ff.

² loc. cit., p. 143.

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introspectible conation and purposive effort. We are always attending to something so long as we are conscious at all. Changes in voluntary attention occur whenever as the result of impulse and volition we begin to attend to something to which we were not attending a moment ago. When the first notes of an overture are played and we reluctantly interrupt an interesting conversation and settle down to listen to the music, we make an effort of voluntary attention. When we are going round an exhibition and pass from one picture to the next, we make a voluntary transfer of attention. Voluntary attention in aesthetics has no fundamental importance but occurs whenever we begin to appreciate anything aesthetically.

Conditioned attention is the result of acquired experience building upon the foundation of native impulse. An inexperienced tennis player, who has been instructed to 'watch the ball' and 'follow through', may voluntarily concentrate his attention upon the flight of the ball to such effect that he fails to manipulate his racket and misses the ball; on another occasion he will voluntarily concentrate attention wholly upon the stroke and will again miss the ball because he has not sufficiently attended to its line of flight. In the case of the experienced player attention to the ball, to stroke, stance, etc., have become automatic and he can give all, or almost all his conscious attention to deceiving the expectations of his opponent as to the manner and direction of his return. By training and experience the progress from voluntary to automatic attention is achieved and the organism is conditioned to answer a certain type of stimulus with an appropriate type of response. Appreciation of works of art is impossible unless you are conditioned to respond to the type of stimulus which it is the province of the artist to manipulate; your habit of automatic attention must be correctly trained to sensitivity for those properties of sensory impressions with which the artist works. Unless you have sensitivity to these properties you will be unable to become aware of the sole media in which the artist creates.

The artist tends to be more alive to intrinsic qualities and differentiations of particular sensations—colours, shapes, sounds, etc.—than the layman in everyday life, because in everyday life we attend to intrinsic qualities of sensations and differentiate

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among them only in so far as is necessary to enable us to discriminate for practical purposes the 'things' to which they belong. The artist is still more interested in general formal properties which pervade sensory fields, and these rarely have any significance for the practical discriminations of everyday life.

When the activity of sensation is conditioned automatically to attend to the sort of stimulus with which the artist works, when after the voluntary act of attention by which one begins to look at a picture aesthetically one becomes immediately receptive to the stimuli provided by the artist and no further voluntary movements of attention are necessary, then, and then only, is appreciation of the work of art as an individual creation possible. There is prevalent, I believe, among people who would like to be able to appreciate works of art but are unwilling to undertake the necessary training of sensitivity or conditioning of attention, a feeling that this training is abnormal, that it should be unnecessary, and that its present necessity is due to a certain malice or wrong-headedness among artists. The training of aesthetic appreciation is a normal cultivation of a native human faculty. There are few people who do not delight in the individual colours of flowers, of the sky at sunset, of fabrics; there are few who have not some sensitivity to shapes of trees in winter, the graces of the bodies of men or animals, the beauties of vases or buildings; and a certain appreciation of forms is a common possession, as in evinced by appreciation of style in dress, etc. These are the elementary manifestations of aesthetic sensitivity and the training of aesthetic appreciation is but the normal development of this sensitivity; it differs in degree but not in kind from the native faculty. The necessity of training is common to all highly developed faculties and the demand to appreciate great works of art without undergoing a rigorous training of the faculty of sensitivity is as absurd as it would be to expect to appreciate the *Principia Mathematica* without training the mind in mathematical and logical reasoning.

If the difficulty is greater than it should be, this is due to certain abnormalities in modern society rather than to the fault of the greater modern artists. The complexities of modern civilization tend on the whole to discourage sensory awareness for its own sake and everywhere emphasize the practical utilization of

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sensations (posters, directing lights, etc.). Owing to a general misunderstanding of the nature of aesthetic awareness, and its subservience in the modern scheme of values to more important financial interests, the native sensitivity to aesthetic properties is attacked and distorted from early childhood throughout the most receptive and formative years of life. The result is that only when this faculty and the impulse to activate it are exceptionally vigorous is it likely to survive modern conditions. The child's first introduction to the art of painting is through the illustrated book of nursery pictures. There the pictures are in general of no value for aesthetic observation and the child learns, before he learns to read, that the picture tells the story. If you are attending an exhibition with a friend and he asks you to 'explain' a painting by Kandinsky, you may be pretty sure that his habits of conditioned attention are not developed in such a way as would enable him to respond to aesthetic stimulus. Because the only explanation that could be given would be a disquisition such as is now being given on the nature and pre-conditions of appreciation.

The great original artist is one who develops in himself and utilizes in his work sensitiveness beyond what has been achieved before to new constructional properties of sensory fields. Thus, for example, Rembrandt sacrificed his life to the attempt to represent in paint the qualities of atmospheric light and its effects upon objects, and developed a sensitivity to this property of visual fields more acute than had ever existed before. The painters Gauguin and Van Gogh added to the then existing sensitivity to the 'perspective' qualities of colours; Juan Gris and Matisse among the moderns have developed sensitivity to certain sorts of formal qualities pervading the whole sensory field further, I think, than has been done before. By frequent experience of the works of such artists those of us who are non-creative in their sphere may develop sensitivity to the new tracts of experience which they present. Only after we have developed this sensitivity, and so are able to approach their works with automatic attention properly conditioned, that is in a state of appropriate receptivity, can we appreciate them as individual creations or judge between them or compare and assess them with the works of artists of the past, for whose demands upon sensitivity we are prepared.

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This is one of the few ways in our earthly life by which capacity for experience can be definitely extended and by which those men who are creative in some one capacity can deepen and enrich the capacity for awareness in others.

What is called the 'effective intensity' of a sensation within any field is a co-efficient of the degree of total attention which it receives and its own 'inherent intensity'. A very shrill noise will impinge upon the attention even when we are wholly concentrated upon visual or gustatory experience or engrossed with our own thoughts. The telephone bell and the motor horn are designed upon this principle. On the other hand we may, by appropriately directing the attention, become aware of a sensation which would not ordinarily have penetrated to consciousness. An anxious mother will suddenly cry 'Listen!' and while the whole party concentrates for aural sensation, she alone will announce that she hears the baby crying. As James Ward said: 'If a sensation is out of the focus of attention, it has effectively and actually for the experient himself not only less clearness—stands out less from the general field—but it has also less intensity than when attention is concentrated upon it.'¹

We speak of 'coerced attention' when, or in so far as, experience is wholly controlled by the intrinsic intensity and clearness of the field of awareness. When, being fully conditioned to respond to the situation before us, by an act of continued volition we concentrate and fix attention upon a chosen field, *distributing attention evenly over the whole field*, our experience or awareness is wholly conditioned by the intrinsic character of the field. This is the attitude of *receptivity* necessary to aesthetic appreciation. For receptivity to be complete the two conditions are equally necessary: the experiment must be fully conditioned to awareness of all the presentations within the field and attention must be maintained evenly over the whole field so that it is experienced as a unified whole and not as a collection of casually related items.

Conditioning may be defective in two ways. Through lack of perceptive training the observer may be insensitive to certain ranges of differentiation within the presentational field. There are persons who are not alert to the picture space of Cézanne, the perspective of Chinese painting, the colour perspective of

¹ James Ward, *Psychological Principles*, p. 118.

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Matisse, the subtle gradations of Sickert, Brancusi's manipulation of formal properties or the qualities emerging from combinations of *timbre* in what is known as orchestration.¹ When conditioning is in any degree inadequate, leaving us insensitive to certain ranges of stimulus, it is impossible for attention to be evenly distributed over the work of art, or for it to be observed as a complex unity, because there are certain 'dead' areas within it which are not observed at all. If the observer is insensitive to certain of the stimuli which the artist has provided, or is uninterested in them, his experience will not be entirely controlled by the artist because those of the stimuli to which he is obtuse will not act as stimuli for him. Receptivity is defective and he will not succeed in actualizing in his own experience the work of art created by the artist. On the other hand, if certain of the presentations provided by the artist seem strange and new, their very unexpectedness will violently attract attention upon themselves so that they obtrude in awareness and are no longer seen in their context. This is commonly the fate of creative artists who develop a new style or new ranges of sensibility. It is why the later Beethoven was ridiculed in his lifetime and why 'modern' music had to become familiar before it could be heard. For if attention is forced upon a new quality of sensation because of its strangeness, the uniform distribution of attention over the whole work of art is unbalanced and the work of art is not actualized as a work of art. The element to which we are not yet conditioned receives too great prominence in attention simply because it is strange and unexpected, while the work of art does not penetrate to awareness as a unified whole.² Again receptivity is imperfect.

¹ Constant Lambert has written of the orchestration of Sibelius that it 'is marked by an intense realization of the unexplored possibilities of string colour, while the neglected lower registers of the orchestra are treated with great virtuosity, his use of independent harmonic parts on double-basses and tympani being particularly striking'. Not all people who experience emotional reactions to a Sibelius symphony are conditioned competently to become aware of the presentational complexities here indicated.

² There are always, too, 'fake moderns' who cash in on a new fashion by reproducing the element of newness and strangeness without capacity to mould it into a work of art. For among the appreciating public there are as many 'moderns' as 'traditionals' who are unable by direct appreciation to distinguish a genuine work of art from a bogus construct.

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When we are fully conditioned to appreciate a work of art, each element in the total presentation has the value which is intrinsic to it. But what that value is, is very difficult to determine. Experimental psychology has done a great deal of work on the intrinsic value of particular sensations, but its results are of little value for the study of appreciation because its method is to deal with sensations in isolation or rather against a background of vague generalized sensation such as always accompanies normal waking consciousness. In fact the intrinsic value of a sensory element in an aesthetic field, its intrinsic force or prominence, is mainly a function of its *contrast* with all other elements within the presentational complex which is the work of art. By taking it out of this complex for experimental treatment you do not in fact isolate it but put it in a different context against the background of vague generalized sensory experience which is eliminated from aesthetic awareness. Intrinsic prominence in a work of art is not a factor of what experimentalists call 'intensity'. In a loud passage of music a sudden silence or softness has more prominence than another loud chord. In a field of brilliant and saturated colours a pale or dull colour has prominence. In fact, what we think of as 'intrinsic prominence' is wholly a function of relation and is not measurable experimentally outside the total system of relations which is the work of art. On the other hand, certain hues, certain qualities of *timbre*, seem to have greater 'aggressiveness' than others. The factors which determine prominence value in an artistically organized presentational complex are very little understood.

Certain psychologists have asserted that 'regular shapes' and 'recognizable patterns' have prominence as such. This I do not believe to be true. It has seemed specious because in experimental psychology regular shapes have been observed against inchoate backgrounds and have had prominence against these backgrounds. But if you cover a paper with regular circles and insert one irregular figure, it is the irregular figure which will have prominence and stand out. If you cover a paper with recognizable patterns such as the arrangements of dots on the faces of a die and insert one meaningless pattern, it is the meaningless pattern which will stand out. Artists rarely use regular circles or rectangles because such shapes would stand out with too great

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prominence against the background of more subtle and complicated shapes in the rest of a picture. On the other hand a shape which has representational meaning does acquire prominence through its meaning. This is illustrated by the visual puzzles drawn for children, in which a numeral or a face is 'hidden' within a meaningless complex of lines and shapes. Once the meaningful figure has been detected, its prominence cannot be made to fade. This fact is of great importance in understanding representational painting, because any contained configuration which has representational significance gains thereby an additional prominence or aggressiveness over configurations which have no or less important representational significance. Representational significance is of course only one element among others in determining visual prominence within an artistic whole. A patch of colour without representational significance may still be the most prominent patch in the picture because it differs from all the rest very greatly in brilliance or saturation or hue. But other things being equal, a significant configuration will have greater prominence than a non-significant configuration. This factor of prominence, which is one of the factors determining the balance of relations in an organic whole, is not susceptible of mechanical measurement.

Receptivity, or the coercion of attention by the artist, demands therefore adequate conditioning and alertness and the even distribution of attention over the whole field occupied by the work of art in order that each analysable part of the field will have its due prominence and make its due contribution to the whole in awareness. For a work of art is single and individual. In all strictness it can only be appreciated as a single individual, not as a theoretical construct of discursively apprehended parts, and therefore if receptivity is imperfect or partial there can be no appreciation of the complex whole. It is common to find persons who are powerfully 'moved' by certain passages in a musical composition but are insensitive to certain more complex formal properties which pervade the whole composition or are unable to focus attention for a sufficiently long period to apprehend the composition as a whole. But unless the composition is apprehended as a single individual, either by focusing attention uniformly through its performance or by subsequent reconstruction

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from memories of a number of performances, there is in the strictest sense no aesthetic awareness of that composition as a work of art and no appreciation of it. Perhaps few people are able to contain in their minds synoptically a whole musical composition or literary work without losing the complexity of its details or splitting it up discursively into a number of isolated bits. The same thing is true of pictures, although few people realize this. Appreciation with full receptivity demands a mental capacity and an exercise of attention beyond the powers of many people. The simultaneous content of awareness must be expanded enormously beyond the habits and requirements of practical and scientific avocations.

This characteristic of receptivity is not very different from what some writers have meant by the 'suggestibility' of the aesthetic attitude. But a proper understanding of its nature enables us confidently to discount theories which align aesthetic awareness with the 'day-dream'. The free and uncontrolled, private and wayward, imagery and association of the day-dream are completely and absolutely opposed to the controlled receptivity of aesthetic contemplation. We day-dream in the presence of natural scenery and a work of art may afford the stimulus and inducement to day-dream;¹ but when this happens our state of mind is not that of aesthetic awareness. Even in the case of literary art, which differs from the other arts in that imagery and association bulk far more largely in its essential structure, it is generally admitted that the better the poem the more complete its control of imagery and association in the adequate reader. Nor does this account of receptivity lend any support to those writers who have endeavoured to explain the aesthetic attitude by the analogy of cerebral dissociation in hypnosis. Bergson, among others, seems to suggest this view when he writes: 'L'objet de l'art est d'endormir les puissances actives ou plutôt résistantes de notre personnalité, et de nous amener ainsi à un état de docilité parfaite où nous réalisons l'idée qu'on nous suggère, où nous sympathisons avec le sentiment exprimé. Dans les procédés de l'art on retrouvera sous une forme atténuée, raffinés et en quelque sorte spiritualisés, les procédés par lesquels

¹ See M. Souriau, *Le Rêverie esthétique*, pp. 42 f.

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on obtient ordinairement l'état d'hypnose.'¹ He rightly calls attention to the *detachment* and *receptivity* of the aesthetic attitude. But the analogy of hypnosis was not necessary for this and is positively misleading. Hypnosis is, in principle, a lapse of consciousness induced by artificially concentrating attention upon an object of apprehension which is inadequate to allow the discriminative activity of awareness to continue. Consciousness lapses because awareness is emptied. Aesthetic appreciation involves the artificial concentration of attention with unusually intense activation of one mental faculty upon an object which is too full and of too rich complexity to be apprehended in its entirety. Consciousness is stimulated to more intense awareness, which is the opposite effect to hypnotic phenomena.

Finally we come to the analogy between aesthetic contemplation and the mystical ecstasy. I do not intend to speculate for long upon this analogy, because the mystical ecstasy is, psychologically, at least as inadequately understood as the aesthetic experience. If we refer to the descriptions of the ecstatic experience by the most accomplished mystics, we find asserted the complete concentration of attention upon the object and the perfect 'receptivity' which we have already discovered to be characteristic of aesthetic experience. In both cases there is lapse of the normal awareness of the self which is omnipresent in practical experience, this being, of course, a natural concomitant of concentration of attention upon the object. The final mystical ecstasy involves the lapse of all consciousness except an emotional experience which is not describable or elsewhere experienced. A similar emotional experience seems in some cases to be the final culmination of successful aesthetic experience, chiefly of aesthetic apprehension of musical compositions. The explanation may be that when any faculty of awareness is concentrated upon a single individual object of awareness and has become completely occupied with the object as an individual (comparison, etc., being thus eliminated), and the object is adequate to support intense activation of the whole attention upon it, consciousness lapses because when the object is completely known in awareness there can be no further discrimination or discovery, and since awareness of the self is in

¹ *Les Données immédiates de la Conscience*, p. II.

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abeyance, the awareness which has been attained of the object leads to emotional unification or identification with the object. When such identity is complete and uninterrupted, we have the mystical or aesthetic ecstasy. This experience differs from the lapse of consciousness in hypnosis because the latter is caused by concentration upon an object inadequate to activate the faculty of awareness, while the former is a final result of a completely satisfied activation. I believe these resemblances are sound, but would hesitate to push the analogy as far as has been done, for example, by Aldous Huxley.

4. *Vivacity*

Consciousness is as a thin pencil of light moving amid a penumbra of unrealized experience. There always exists at and beyond the boundaries of consciousness a formless mass of dark and undifferentiated mentation—half-formed thoughts and judgments, dispositions barely concreted into assumptions, incipient impulses and conations which do not win to birth, moods not yet formed into emotions, visual, auditory, tactual, olfactory, gustatory and somatic impressions too vague to be lastingly impressed upon the conscious mind. Consciousness is a function of attention. As we say, sensations and cogitations to which we do not attend do not pass the threshold of consciousness or do not enter far enough beyond the threshold to remain impressed upon conscious memory. Consciousness is in continual linear movement—we speak metaphorically of the ‘stream of consciousness’—following the movements of attention. Like a moving spotlight upon a half-darkened stage, it picks out successive objects of interest amid the murk. Its intensity varies inversely with its extension. As it is expanded to illumine a larger area of the stage, it lights with less brilliance. As the area which it lights up is diminished, its brilliance is increased.

In aesthetic appreciation we artificially limit the area of our attention in order to increase the intensity of awareness. All practical interests are arrested and held in abeyance, even the incipient muscular reactions which enter into the structure of ordinary perception of the external world, so that we achieve an attitude of *detachment*. Awareness is canalized rigidly into the visual or aural faculty (in some arts the two are combined). No outside

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disturbances are allowed to obtrude. All experiences alien to the narrow channel of awareness, whether caused by outside stimuli or thoughts and images subjectively induced, are strenuously held beyond the threshold of consciousness. Even awareness of somatic sensation, which is an undercurrent of all ordinary consciousness, is interrupted in order that we may achieve the attitude of *impersonality*. Even the area of the perceptive faculty which is activated is artificially reduced. When we are engaged in appreciating a painting or a musical composition we become blind and deaf to all other visual or aural stimuli. But within the reduced area upon which the one activated faculty is focused attention is uniform and evenly distributed. The spotlight of consciousness no longer flickers and switches from presentation to presentation within the reduced area of awareness but illumines the whole with an even and steady light. This is what we mean by the attitude of *receptivity*.

When attention is artificially confined to one mental function and the extension of that function is artificially reduced, awareness within the narrowed field of consciousness is raised to a higher pitch of intensity than usual. As the expansion of mental activity is contracted, its *vivacity* is enhanced. The principle is sufficiently established. By increasing the content of consciousness you decrease its vivacity and to be conscious of everything is to be conscious of nothing. Concentration heightens vivacity by confining awareness within chosen limits. In aesthetic appreciation, having achieved such heightened awareness by the concentration of the mind, we cultivate even fuller magnification of intensity by exercise and strain, as the power of a muscle is developed by work. We thus achieve an absolute and not merely a relative heightening of consciousness.

Consciousness is awareness of order, relation and difference. There could be no consciousness of a chaotic manifold of atomic and unrelated *sensa* such as was imagined by Hume and Kant. 'Pure sensation' in this sense is pure fiction, a logical ultimate and not a reality of experience. Nor could there be consciousness of the primeval undifferentiated sensory *continuum* posited by James Ward. This was another logical fiction. Consciousness begins with discrimination and consciousness of the completely undifferentiated would be the absence of consciousness. In order,

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therefore, for consciousness to remain alert when it is concentrated within a narrow field, the object of awareness must be sufficiently complex to support this heightened activity. If you fix your whole attention upon a comparatively simple object—an apple, for the purpose of illustration—and rigidly exclude all mental images of previously observed apples, all thoughts and associations evoked by apples in general such as the unfortunate incident in the Garden of Eden whereby the apple acquired an unpleasant significance for the eschatological destiny of mankind, the apples in the Garden of the Hesperides, the golden apple of Eris, the disconnected dithyrambics of Dali on the apples of Cézanne and the Adam's apples painted by the pre-Raphaelites, if you empty your mind of all else and forcibly train your whole attention on the immediate sense impressions derived from the particular apple before you, you will find yourself becoming progressively more aware of the differentiations and relations among the colours and shapes of this apple. But there is obviously a limit to this progressive increase, and with a comparatively simple object of perception the limit may be reached very soon. After the limit has been reached, it is no longer possible to remain conscious while occupying the attention wholly with this object. Unless your attention is distracted, you either pass into mystical ecstasy or lapse into hypnotic trance.

James Ward has ably shown how the complexity of an object penetrates to awareness. 'Suppose that, in the course of a few minutes we take half a dozen glances at a strange and curious flower. We have not as many complex presentations, which we might symbolize as $F_1, F_2 \dots F_6$. But rather, at first only the general outline is noted, next the disposition of petals, stamens, etc., then the attachment of the anthers, position of the ovary, and so on; that is to say, symbolizing the whole flower as $[p^1(ab)s^1(cd)o^1(fg)]$, we first apprehend say $[p^1 \dots s^1 \dots o^1]$, then $[p^1(ab)s^1 \dots o^1]$, or $[p^1(a \dots)s^1(c \dots)o^1(f \dots)]$, and so forth. It is because the traits first attended to persist that those noted later form an addition to them so that the complex may at length be complete. There is nothing in this instance properly answering to what are known as the reproduction and association of ideas; in the last and complete apprehension as much as in the first vague and inchoate one the flower is there as a prim-

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ary presentation.¹ Experience produces a conditioning of awareness as the result of which we are able in the field to which the conditioning has been applied to apprehend more highly differentiated and complex presentations with immediacy. The psychological name given to this characteristic of awareness in virtue of which such conditioning is possible is 'retentiveness'. It is analogous to the conditioning of attention about which we have already spoken. It is possible also to condition a faculty to greater sensitiveness² and acuity.² By training and practice one can acquire the discriminative ability of a colour-mixer or a piano-tuner, one can acquire the miller's thumb or sensibility to the chiaroscuro of Rembrandt or the linguistic cadences of Donne. But it is necessary to remember that in this process of increased awareness of complexity the mind is not creative. It is making itself progressively conscious of differentiations which are from the first latent in the presented material. In no case is it possible to construct into the presentation greater differentiation than was already there, though undetected, from the first.

At this point it is necessary to distinguish synoptic and discursive complexity. When a complex object of awareness is dealt with discursively attention flickers and flashes from one item within it to another, noticing this relation and then that for memorization, dealing with it piecemeal. Each flick of attention spotlights this or that item, there are as many acts of awareness as there are flicks of attention and each act of awareness is followed by an act of judgment. The acts of judgment are then recalled to memory and added or fused together by theoretical

¹ James Ward, *Psychological Principles*, p. 81.

² The meaning of these two words may be illustrated by the analogy of vision. The retina of the eye is fashioned from two sorts of cells, called 'rods' and 'cones'. The rods are *sensitive* to a low-powered stimulus and function when light is dim, when we see in the dusk. The cones require a stronger stimulus, greater intensity of light, but produce an image of sharper focus and more complexity of detail than the rods. This is *acuity* of vision. We may be *sensitive* to beauty or ugliness in daily life—to ugly rooms, houses, streets, to beautiful furniture or gardens. This kind of sensitivity is at a discount in modern society and is tending to atrophy. In its place sit the contemporary gods of sanitation and ostentation—tiled bathrooms, Lyons' Corner Houses, Banks, Picture Palaces. Acuity is the capacity to discriminate with precision and fullness the beauty of works of art.

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reason. In this way we deal with complexity by barricading it from awareness. Each individual act of awareness has as its object a very simple selection from the total complex—one or two items, one or two relations. There is no presentation of complexity; we only gain an impression of complexity at all because we believe that the process of switching attention to very simple selections within the field could be continued for a long time without repetition or exhaustion. Imagine a biologist studying a culture of bacteria through a microscope. He has concentrated his whole awareness through the visual faculty and he has narrowed his field of vision to a very small area. But within this small area he distributes his attention discursively, recording a large number of separate and individual awarenesses of simple items and relations. It would produce the same result if some *deus ex machina* could remove the complex slide from the microscope and present to his eye instead a number of simple impressions in rapid succession. In fact he is no more directly aware of complexity than an astronomer who plots the relations between the stars.

We often judge theoretically that there is complexity. But we seldom become directly aware of complexity and never, I believe, to more than an elementary degree except in aesthetic appreciation. For in order to be aware of complexity by direct acquaintance we must hold attention evenly distributed over the whole field of presentation and not allow it to flicker from this to that simple item in the field as in the above examples. For by dividing attention we destroy the complexity for awareness and reduce it to a complexity for theoretical judgment. We must therefore know the complex presentation in direct acquaintance as a unity in order to be aware of it as complex; for if we attend to it as a plurality of related units and not as a single unity, its complexity has disappeared for direct awareness. Consciousness of complexity is therefore consciousness of a complex unity over which attention is evenly distributed, illuminating it with uniform light. The importance of sensory patterns or configurations in immediate apprehension, not constructed by a semi-rational, discursive faculty of perception from their constituent elements, was first studied by Ehrenfels in 1890 and has been made the basis of the doctrines of the *gestalt* school of psychology.

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Psychologists of this school have amply demonstrated that for experience configuration is ultimate, although logically it may be analysable. We do not mentally construct perceptual configurations from their constituent elements previously experienced in isolation. Analysis is secondary to awareness of the configuration as a unitary whole. In our apprehension of the 'five-pattern' previously mentioned we have a very rudimentary apprehension of complexity, because we are aware of the pattern as an immediate unity and at the same time as a complex unity. We do not construct the unity by switching attention to and fro between five dots but perceive the pattern with as much immediacy as we perceive the five dots. The essence of a configuration is that it is an organic whole, a whole or unity which is prior to its parts and cannot be discursively reconstructed from the parts and the relations between the parts taken analytically; the parts are what they are in virtue of the whole of which they are parts. Although in experimental psychology only very rudimentary configurations have been studied, since only they are susceptible of study by the methods available to experimental psychology, there is no known limit to the complexity and elaboration of configurational wholes which can be apprehended with immediacy, not discursively, as single wholes. And enhancement of the vivacity of awareness, intensification and invigoration of consciousness, depend upon the apprehension of very complex configurational unities.

There is no enhancement of vivacity if the complex unity is apprehended discursively because the apprehension is broken up into a number of successive acts of simple awareness. It is necessary that awareness should be unified by an even distribution of attention in what we have called a 'surview'. But it is just as obviously impossible to apprehend a complex unity unless the presentation which enters into awareness is in fact an organic whole. A work of art is a very complex and subtle organization of configurational patterns into a single configurational whole and I know no other objects of experience which have this property of organic wholeness in more than a rudimentary degree except works of art.

In anatomizing appreciation, therefore, particularly in respect of the uniform distribution of 'coerced' attention and the en-

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hancement of vivacity, we have incidentally reached a second time a definition of a work of art.

When attention is focused into one perceptive faculty and the field of awareness is diminished, the faculty which is being called into play functions at greater intensity than usual. And as our total awareness may be more intense at some times than at others—sometimes we are more alert, more alive, at other times consciousness is at a low ebb of vitality—so when the mind is aesthetically attuned to appreciation it will function within the narrowed field with greater vitality and energy than when it is discursively occupied. But the extent to which awareness is energized will be conditional upon the complexity of the object. If the object lacks adequate complexity, attention lapses or the tension and vigour of consciousness are reduced. One of the necessary properties of a work of art, one of the properties we refer to when we call it beautiful, is an adequate complexity of structure (organic, not schematic) in respect of the formal relations cognized in aesthetic awareness to make prolonged and repeated contemplation possible without that satiation which compels either a lapse in consciousness, if attention is artificially retained upon the object, or the diversion of attention to associated ideas and reflections (the Garden of Eden or the Adam's apples of the pre-Raphaelites). The other necessary quality is organizational unity. Intensity of awareness is stimulated by degree of organization. If a work of art is imperfectly organized, attention is distracted among various items in the field, which are related or classified discursively and the vigour of perceptive activity is reduced. Therefore it is that when a work of art is completely organized into a single organic unity of interlocked organic configurations perceptual activity is at its maximum vivacity. In aesthetic contemplation not only is attention turned away from the theoretical, rationalizing and classificatory habit to purely perceptual activity, not only does perceptual activity gain energy and vigour in consequence, but its energy and vitality are raised to the highest point by the qualities of complexity and organization in the object. These qualities we shall call *beauty* and the stimulation of perceptual activity in the contemplation of beauty we shall call the *vivacity* of aesthetic appreciation.

When an object is isolated in aesthetic consciousness, it be-

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comes an individual and unique. At its most elementary, when we look at a work by Ben Nicholson, we do not say 'here are two squares' or 'here are three circles'. We say, if it is a work of art, 'this is a unique configuration consisting of a specific and unique construction of subordinated and super-ordinated configurational patterns, the basic configurational scheme of which is the configuration formed by three circular forms in juxtaposition to each other and a background configuration'. To be a unity and individual, to be unique in perception, a work of art must always be a *single organic whole of perceptual configurations*. If it were not organized into a single configurational unity, consciousness would begin to classify the elements of which it was composed, and classification is a theoretical and conceptual, not an aesthetic, function. The work of art must also have adequate complexity. A construct by Malevich, Mondrian or Ben Nicholson may achieve perfection in the formal organization which is essential to the existence of a work of art and to the possibility of aesthetic awareness; but it may lack the richness of inner complexity which would stimulate prolonged contemplation by a trained observer. In this respect it may be less important to aesthetic contemplation than a more subtle work of formal art, such as an abstract by Brancusi or Juan Gris. On the other hand an apparently simple line-drawing by Modigliani, or even by Forain or Toulouse-Lantrec, may reveal increasing complexity to prolonged contemplation.

The artist must be unusually alert and sensitive to perceptual differentiations within a given field and unusually sensitive to configurations in that field. For example, an artist will suggest in a few relatively simple lines a characteristic shape of an animal, or a characteristic attitude, by means of a characteristic configuration which has been unconsciously perceived by the generality (as is proved by their ability to recognize it when presented in the artist's drawing) *but which has not before been consciously seen* by them. But the creative gift of the artist is something more than this. It is the ability to conceive and construct in his medium configurations of far greater consistency and complexity than are contained in nature—that is, in the perceptual experiences possible from other sources than the works of the artist. The power to become sensitive to the differentiations of perceptions

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and to the configurations present in nature can be cultivated. The power to become sensitive to the more complex and unified configurational constructions created by the artist can also be cultivated. The creative gift of the artist can be developed by him but cannot be cultivated by one who does not own it.

It was said in an earlier chapter that we could only understand why an objective property common and peculiar to all beautiful objects, if such a property were found, was to be called beautiful, if it were found that all things characterized by this property, and only these things, were associated with a special and peculiar mental attitude or activity. The foregoing attempt to analyse and to understand the special characteristics of aesthetic contemplation has led us to the view that aesthetic contemplation by its very nature postulates a special type of object without which it can function only in an elementary and imperfect way. The necessary character of the proper objects of aesthetic contemplation was found to be a property which we call 'complex configurational unity'. It is to be shown that this conceptually rather difficult property is peculiar to those things which are commonly regarded as works of art, distinguishes them from all other things and according to the degree in which it is present distinguishes a good from an indifferent work of art. If this view can be maintained, it will solve the hitherto insoluble antimony between 'subjective' and 'objective' beauty. If it is rejected, I do not think that the arguments in this essay, or any arguments which have come to my notice outside it, are of very great importance.

Aesthetic appreciation has been described and differentiated by four qualities, which we have called detachment, impersonality, receptivity, and vivacity. So far cognisance has not been taken of the emotional effects which are a general accompaniment to appreciation of art, and which are by most aestheticians thought to be most characteristic of appreciation. There is involved no depreciation of the importance of these emotional accompaniments and no desire to obscure the fact, which is taken to be obvious, that art may be a medium for the communication of emotion.

In opposition to the various 'emotional' theories of aesthetics we start from the position that aesthetic contemplation is a type

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of awareness. Pictures and statues are made to be looked at, music is made to be listened to. We neither deny nor belittle the individual importance of emotional response but maintain that methodologically and for the scientific development of aesthetics it is secondary to the analysis of awareness and the object of awareness.

In the first place the pleasure derived from aesthetic contemplation itself is undoubted and is akin to the pleasure which attaches to the intense and successful activation of any human faculty. It is of the same category as the pleasures derived from intense activation of the theoretic faculty in mathematics, philosophy or chess and from the successful and disinterested activation of bodily functions in athletics. It is analogous to the pleasure of the craftsman in his craft, of the scientist in his science and of the athlete in his body. 'L'emotion esthétique, on le sait, diffère des autres en ce que l'activité qui la produit a pour but non l'accomplissement d'une fonction vitale ou sociale, mais le plaisir même de s'exercer.'¹ We would say rather that pleasures of this sort are not emotions in the ordinary sense. Whether or not this pleasure is the conscious motive in the case of this or that person who cultivates his aesthetic faculties, it is this which makes the pursuit worth while to him in so far as he achieves genuine aesthetic awareness and sensitivity.²

There is, too, I think, a special feeling of *value* commonly ascribed to the intense and unimpeded activation of any skilled faculty for its own sake, associated with the sense of heightened vitality and worth belonging to the activity itself and not derivable from any ulterior end which it serves. This valuational attitude explains in part at least the 'values' ascribed to Truth and Goodness, as it explains and justifies the value ascribed to Beauty. For in the appreciation of a beautiful thing some skilled faculty

¹ Ribot, *La Psychologie des Sentiments*, p. 330. St. Thomas came near to our view when he said 'that is beautiful the mere apprehension of which is pleasant' (*id cuius ipsa apprehensio placet*).

² The sharp division of mental life into categories such as 'awareness', 'judgments', 'emotions', 'conations', is necessary to the scientific study of the mind. But I am inclined to think the divisions are truer in logic than in experience and that there is much blurring at the edges. I should hesitate to deny that an act of intense aesthetic awareness or the keen apprehension of a complicated metaphysical distinction was entirely unemotional in character.

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of apprehension is activated to its full capacity and demands are made upon it even beyond its capacity. The faculty is more alive, more concentrated, than in ordinary life and the whole mind is more alert; attention is heightened and awareness more vital. This stimulation of the faculties of the mind is the highest of all human values. Thus the value attached to beauty is analogous to the value attached to the 'truth' which is thought to result from keen and unusually sustained exercise of the speculative faculty.

In this way we can explain the function of the artist without making him an unreal superman, as I. A. Richards and many others in the Romantic tradition are impelled to do. An artist is often a very ordinary man; many artists have been far from admirable by general standards—spendthrifts, drunkards, bores. But an artist has some one faculty at least unusually highly developed and has in the field of this faculty the ability to create organic wholes for contemplation, which other men can only perceive and appreciate.

It is also indubitable that individual sense impressions are often pleasant or unpleasant. When we attend to any sensation for its own sake it is likely to acquire feeling-tone, pleasant or unpleasant, whereas so long as sensations are used in practical perception simply as symbols of things or guides for behaviour they are rarely pleasant or unpleasant. Because we rarely eat to satisfy hunger we find that antipathies and predilections for sensations of taste are more vigorous and more common than antipathies and predilections for sensations of sound, and these in turn more vigorous and common than antipathies and predilections for sensations of colour. Scents, which normally have no significance for behaviour, always possess an associated feeling-tone. But when in exceptional circumstances, for example to a chemist, they do acquire practical significance, the feeling-tone tends to disappear. Through practice and use a chemist may acquire more than ordinary sensitiveness to odours and at the same time immunity from their more extreme effects upon feeling-tone, whether pleasant or unpleasant.¹

¹ It is probable that no general physiological reason can be given for the pleasantness of some sensations and the unpleasantness of others. Darwin takes this view when he says: 'No doubt the perceptive powers of man and the lower animals are so constituted that brilliant colours and certain forms, as well as

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The naïve view that a work of art packs the greatest possible amount of separately pleasant sense-stimuli into the smallest space, is obviously erroneous. A work of art as a unified configuration may utilize sense-stimuli which separately are unpleasant and a great work of art may not on the whole arouse as much pleasure as displeasure, apart from the special pleasure involved in its contemplation. It is, I think, true that the pleasure-quality of 'simple' sensations plays very little part in fine art. In the complex configurational structure of a work of art, the 'simple' sense-stimulus loses its individuality and with it its attendant pleasure-tone.

It is undoubted that emotional tone, as distinct from simple pleasure or displeasure effect, is aroused by some relatively simple perceptions or perceptual configurations, which are used as elements in works of art, and that their emotional tone is not due solely to association. Melodic and rhythmic configurations in music have fairly well defined emotional colour for many people, which may be stronger when they are first heard than when they have become familiar. Certain shape configurations much sought after by the Surrealists, and achieved perhaps most successfully by Ives Tanguy, arouse emotional effects without associative cause akin to the peculiar type of emotion which colours some dreams. In general, it has not proved possible to trace the emotional effects of all configurations of shapes, colours and sounds, even perhaps some configurations of word-rhythms, to associative factors. It is popular to 'explain' emotion as somatic sensation due to visceral and neuronic changes which take place when impulses are aroused but do not receive immediate satisfaction. If you hear the hoot of a motor horn and immediately leap aside, you do not experience an emotion of fear. If you hear a hostile aeroplane overhead and cannot take action, fear is experienced.

harmonious and rhythmical sounds, give pleasure and are called beautiful: but why this should be so we know no more than why certain bodily sensations are agreeable and others disagreeable.' When we consider the extent of individual variability in this matter, and the fact that many sensuous pleasures are only acquired by habit (e.g. the taste for champagne and olives and tobacco), it seems certain at any rate that those explanations are inadequate which assert that the pleasurable sensations are those which are easier for the sense organs, or more conducive to vitality in the organism, and the unpleasurable sensations the reverse of these.

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I doubt whether the emotions aroused by the perceptual configurations used as elements in art can be fully explained either by the stimulation of unsatisfied impulses or by association. But it is certainly impossible to explain art or to work out a satisfactory theory of beauty from the arousing of unsatisfied impulses, whether they remain unsatisfied owing to the equipoise among several divergent impulses or for any other reason. For the use of these emotionally coloured perceptual configurations is not necessary to a work of art and is never a most important feature.

Finally, emotions may be part of the *content* of a work of art. In literature the presentation of emotions and impulses is a very important part of the 'material' presented for apprehension. In pictures which 'tell a story' some presentation of emotions may occur and to this extent their appreciation is analogous to literary appreciation. When emotions are presented, whether by words or by pictures, and form part of the material to be contemplated in a work of art, the same principles of organization through complexity to unity apply as in the simpler cases we have used in illustration, when the artistic content consists of colours or sounds. It is true that when we cognize or apprehend an emotion by direct awareness as in a work of art rather than theoretically in a textbook of psychology, we tend in some degree to experience the emotion in ourselves by sympathetic reverberation. On this fact have depended the many developments of Aristotle's theory of emotional 'katharsis', of which Burke's is typical.¹ It is clear that when, for instance, we are seeing or reading a drama the emotions portrayed are experienced by sympathetic 'reverberation' in ourselves. It is equally certain that this sort of emotional disturbance is very different from the experience of the 'same' emotions in real life, though psychology has not yet succeeded in adequately explaining the 'induced' emotions of art and how they differ from 'real' emotions. It is certain too that when after the performance or the reading we come to appreciate the drama as a whole concentered in imagination and memory, we do not again experience the varying emotions we

¹ Burke held that emotion 'clears the parts, whether fine or gross, of a dangerous and troublesome encumbrance' and that the natural exercise of even painful emotions is in itself delightful. Hence by appreciation of beauty we clear the system as by a kind of affective purge and find the process delightful.

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experienced during the performance. Such speciousness as the 'emotional' theories of beauty show derives from this emotional reverberation experienced during a protracted act of awareness and is chiefly limited to literary art. A literary work or a piece of music is 'appreciated' when it is recalled imaginally in a single act of apprehension as a single whole. The 'emotional' theories of beauty confuse the represented emotion which is part of the artistic material, our imaginal awareness of this presentation and the reverberated emotions experienced during the prolonged presentations of music or literature but not in the final act of appreciation.

Chapter VII

MATHEMATICAL NORMS IN AESTHETICS

ARTISTS have not always, or usually, been self-conscious creators of Beauty as they are to-day. It was the Renaissance which was responsible, by its conjunction of the ideas of art and beauty, for an awakening to a new level of awareness which will one day be recognized as a more important contribution to the spiritual history of Western man than all the artistic achievements of that age, superlative as many of them are in their kind. Previously artists worked to accepted canons of correct craftsmanship and their aim was the aim of the craftsman. The sculptor was not separate from the stone-mason and the architect was but a better builder. Apart from tentative anticipations in Roman descriptions of Greek art, discussion of the aesthetic qualities of works of art was almost unknown. Men appreciated beauty without being aware of it and the beauties of nature were not held distinct from the beauties of art. The new consciousness of beauty as an end to be pursued for its own sake emerged at the Renaissance from the fusion of two impulses, the naturalistic impulse and the impulse towards the ideal.

As we have indicated in an earlier chapter, aesthetic theory of the Renaissance was grounded in earthy realism. Truth to nature was paramount; and truth to nature meant representational accuracy such as would, if perfected, induce the illusion that the real object and not a representation of it was before the observer. Alongside this was the belief that not everything is equally worthy to be represented in art. The artist must represent only the most beautiful and noble in nature. Hence arose the conception of ideal beauty. But the ideal for nature and for art were one. Beauty in nature and art were one and the same and beautiful art was simply the accurate representation of ideally beautiful nature.

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Medieval art was in general non-naturalistic. The ideals of the medieval artist were the ideals of the craftsman, skill in the performance and truth to tradition. Such realism as there is in medieval art is nearly always the spontaneous and uncultivated realism of unselfconscious perceptive alertness, and for that reason tends to caricature or the grotesque. Naturalism was incidental and not a principle. The fashion in taste of recent years has reverted to a renewal of interest in the creations of those periods when the artist was aesthetically unselfconscious. And with the re-direction of appreciation has arisen a new aesthetic among creative artists. Both the root principles of Renaissance aesthetics are rejected to-day. The creative artist no longer aspires to representational realism in the Renaissance sense.¹ And it is no longer believed that there is one and the same canon of beauty in nature and in art. We no longer assume that there is one ideally beautiful set of proportions for the human figure, which would be ideally beautiful whether it were actualized in flesh, in stone, in bronze or in paint. It is now assumed that a stone sculpture may be very beautiful as sculpture although if it were created in living flesh and bones it would be very ugly. Modern aesthetic practice recognizes in art independent structural canons of beauty which are common to the art of the Renaissance and to the art of non-naturalistic periods. The Renaissance saw the emergence of aesthetic consciousness; we are now experiencing the birth of aesthetic selfconsciousness. The conscious aesthetic canons of the Renaissance were valid only for the art of one age and style. With the emergence of aesthetic selfconsciousness we can for the first time begin to understand the principles of universal beauty in art.

There were two canons of beauty in Renaissance aesthetics. The first, of course, was representational correctness. 'How figures when dressed in a cloak ought not to show the shape to such an extent that the cloak seems to be next to the flesh; for surely you would not wish that the cloak should be next to the flesh since you must realize that between the cloak and the flesh

¹ 'There are no fallacies greater than the prevalent ones conveyed by the expressions "out of drawing" or "untrue to nature". There is no such thing as correct drawing or an outside standard of truth for works of art.' Sturge Moore.

'Art is a harmony parallel to that of nature.' Cézanne.

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are other garments which prevent the shape of the limbs from being visible and appearing through the cloak. And those limbs which you make visible make thick of their kind so that there may seem to be other garments there under the cloak. And you should only allow the almost identical thickness of the limbs to be visible in a nymph or an angel, for these are represented clad in light draperies, which by the blowing of the wind are pressed against the various limbs of the figures.¹ But apart from representational realism the beauty of a work of art was the beauty of its subject. As Dürer laid down: 'And a man is held to have done well if he attain accurately to copy a figure according to the life, so that his drawing resemble the figure and is like unto nature. And in particular if the thing copied is beautiful; then is the copy held to be artistic, and, as it deserveth, it is highly praised.' *The second, and more fundamental, criterion of beauty was a criterion applicable both to the natural object and to its representation in a work of art.*

It was an almost unconscious assumption of the aesthetic thought of this period that in every species and kind there is a single ideal set of proportions, by their approximation to which the beauty of individuals, whether in nature or in art, can be assessed. All natural objects deviate in greater or less degree from the ideal proportions of their species. It was thought to be the final merit of the artist to approximate to the ideal, and to approximate more closely than the natural objects which served as his models.

Ideal beauty was thought to be concretely exemplified in the surviving works of the Classical artists and to be theoretically discoverable by mathematics. The age was intoxicated with mathematics and the classical tradition; but beneath this intoxication, and beneath the vitalizing influx of naturalism, persisted the legislative principle of the ideal, a heritage from the foregoing age.² For the legislation of an ideal which was, in principle,

¹ Leonardo da Vinci, *Notebooks*, ed. McCurdy, p. 186.

² The attitude of Greek thought to beauty, exemplified in Plato and Aristotle, was naïvely practical. What we call the 'fine' arts were known to them as the 'mimetic' arts and their assessment was subjected to the same *moral* principles as were applied in practical life, with an initial tendency to suspicion or condemnation on the ground that the fine arts were 'mere imitation'. There was no

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mathematically expressible, was from the point of view of later criticism simply the refurbishing of the old legislative principle of traditionalism from an age when 'the composition of figures' was 'not the invention of painters, but the law and tradition of our Catholic Church, and the ordination and dispensation of our fathers'.¹ As it outlived the other motivating impulses of the Renaissance this legislative principle received its consummation in the founding of the Académie Française in 1635. 'The academic idea', writes F. P. Chambers, 'has been bitterly reviled. It has more often been misunderstood. It was an ideal—the ideal of the Ideal. . . . The academic idea was a grand exhibition of

recognition of a distinctive principle of aesthetic judgment or a distinctive function of art as art. The Greek word for beauty, τὸ καλόν, carries a moral connotation rather than what we now mean by an aesthetic connotation. But alongside this practical attitude was another line of thought which correlated the notion of aesthetic beauty with the organization of parts in a whole to form a unity in variety. The aesthetic commonplace that a beautiful work of art is such that it is impossible to add or take away anything, or alter any of the parts, is genuinely in keeping with Greek thought. (See Aristotle, *Poet.* VIII, 4. 'The story of a drama must be a single one, which is a whole; and the parts of the plot must be so organized that if any part is transposed or removed the whole will be disordered and ruined; for a thing whose presence or absence makes no difference is no part of the whole.' Our own notion of a beautiful work of art as an *organic* unity organically composed of parts which are themselves organic unities, while recognizing this principle of unity in variety, allows for the recognition of the fact that a thing of beauty has relative stability, admitting changes of the parts within limits. For an organic unity has a relative individuality and may remain relatively stable through minor alterations of its parts.) From the mystical mathematical researches of the Pythagoreans, through Plato and Aristotle, developed the line of thought that beauty is inherent in simple and coherent mathematical and geometrical patterns. In the *Philebus* (p. 51) Plato wrote: 'I do not mean by the beauty of form such beauty as that of animals or pictures, which the many would suppose me to mean; but . . . straight lines and circles and the plane and solid figures which are formed out of them by lathes and rulers and set-squares; these I affirm to be not only relatively beautiful, like other things, but eternally and absolutely beautiful. . . . There are, too, colours which are of the same character. . . . When sounds are smooth and clear and utter a single pure tone then they are not relatively but absolutely beautiful.' (See also *Timaeus* 80.) So Aristotle: 'The main notions comprised in the idea of beauty are order, symmetry and proportion (definite limitation).' (*Metaph.* 1078 a.)

¹ Second Council of Nicaea.

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human will and human legislation. It was the very intellectual peak of the Renaissance. Not Leonardo, not Michelangelo, not Raphael, not Titian, but Le Brun, is the consummation of the aesthetic consciousness in Western Europe; to him European taste theoretically converges and from him recedes. But it was the accident of history that the consummation coincided with the life of an inferior artist.¹ It was the consummation of the intellectual or theoretical impulse in the aesthetic awakening, but its coincidence with art of an inferior creative order was not accidental; for the theoretical impulse achieved its theoretical consummation by outliving those other creative impulses from whose conjunction sprang the magnitude of the art of the Renaissance.

The artists of the Renaissance were passionately addicted to mathematics and believed, with the mathematicians, that this study offered for those who were able to discover it the ultimate understanding of aesthetic laws. A manuscript of Vitruvius was discovered by Poggio, who gave it to his friend Alberti. It was printed in Rome in 1486 and for centuries remained the aesthetic Bible of Europe. In 1509 Fra Luca Paccioli di Borgo published at Venice his *Divina Proportione*, the plates to which were made by his friend Leonardo da Vinci.² Piero della Francesca was his teacher in geometry. Alberti, Bramante, Raphael, Michelangelo, all believed that mathematics could show the way to the ideal of aesthetic beauty. Leonardo da Vinci, although he stands apart from his age in his 'scientific' interest in the concrete individualities of nature for their own sake, devoted energy and interest to the mathematical basis of aesthetics. And the faith in mathematics as a legislative principle persisted when the fervour of discovery had waned. De l'Orme wrote in 1567: 'Certainly arithmetic is of such excellence and utility that I hardly know how to praise her enough, as also is geometry which offers a thousand subtle inventions to them that understand her.' In his poem 'De Arte Graphica', Du Fresnoy maintained that geometry

¹ *The History of Taste*, pp. 101-2.

² The manuscript of this work was completed in 1497 and it has since been shewn that parts of it were taken from a manuscript by Piero della Francesca (cf. *Dynamic Symmetry*, p. 152, note 7). An analysis of Paccioli's work will be found in A. G. Käster, *Geschichte der Mathematik*.

was the first essential of aesthetic training and education. By its association with mathematics art was elevated from a banalistic to a 'divine' study. 'It is an insufferable abuse', writes Freart de Chambray, 'to confound painting with the mechanical arts, since she is founded upon a demonstrable science. . . .'

The association of mathematics with art was of course no new thing at the Renaissance. Villard de Honnecourt was as addicted to mathematics as Paccioli or Du Fresnoy. But for the medieval artist mathematics was an adjunct to craftsmanship and a useful means of perpetuating stylistic traditions; for Paccioli it appeared as a glamorous and mysterious guide to the ultimate nature of reality; for the Academicians it was a clear and demonstrable science of the understanding, legislative but no longer a voyage of discovery. In claiming descent from Plato and the Pythagoreans Paccioli interpreted the spirit of his work correctly; the mathematics of the Academie was a reflection of the spirit of rationalism. Now, after a long lapse in the tradition during the Romantic era, we have witnessed a renewal of the mathematical interest in aesthetics. But from the Romantic age has been permanently retained the interest in the individual as individual. Even the work of abstract art is valued for what it individually is and not as an approximation to an ideal type. Modern aesthetics rejects, fundamentally because unconsciously, the Renaissance belief in ideal types of beauty. The emergence of the idea of artistic beauty as structural quality, self-sufficient to itself¹ and not necessarily a reflection of an ideal beauty realized or realizable in nature, invites a mathematical or quasi-mathematical study of aesthetics. But mathematical theory cannot again be self-sufficient. For however perfectly it could express for us the structure which we find beautiful, it could not, now that belief in the ideal type is departed, explain why we find that structure beautiful and not another. The mathematical and objective analysis of the aesthetic object must be brought into accord with the psychological analysis of aesthetic awareness. Only in the union of the two can there arise a complete science of aesthetics.

¹ 'Chaque oeuvre à faire a sa poetique en soi, qu'il faut trouver.' Flaubert.

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I. PROPORTION

The notion of *proportion* is the most elementary principle employed in the objective analysis of beauty.

Proportion is, first, a second-order relation; that is, it is a relation between relations and not a primary relation between terms. It therefore involves at the least three terms ($A:B::B:C$). Secondly, proportion can only exist among terms in connection with some common quality and some quality in respect of which the terms are comparable in magnitude.¹

It was long believed and is still believed by some that the special proportion known as the Golden Section or Divine Proportion is the key to aesthetically beautiful construction. The phrase 'Golden Section' is attributed to Leonardo da Vinci.² It was called by Paccioli the 'divine proportion' and by Kepler 'divine proportion' and 'divine section'. Kepler calls it 'one of the two great treasures of geometry' and 'a precious jewel'. It is the proportion which arises between two relations which have one term in common, when one of the three terms is the sum of the other two terms, viz. $A:B::B:C$ when C is the sum of A and B . When the terms are linear this proportion exists if a line is divided 'in extreme and mean ratio'.³ The complicated mathematical properties of this proportion, the elaborate geometrical developments to which it leads, and its connection with the 'Fibonacci series', all contributed to give it a peculiar glamour and mystery which fascinated a mentality but newly emerging from the trammels of alchemy, hermetics, astrology and mystic numbers.

Any straight line may be divided in extreme and mean ratio by the following method:

¹ 'Un rapport est la relation, la comparaison quantitative entre deux grandeurs de la même nature, ou le nombre qui exprime cette comparaison. Une proportion résulte de l'accord ou de l'équivalence de deux ou plusieurs rapports; il faut donc au moins trois grandeurs pour déterminer une proportion.' (Ghyka, *Esthétique des proportions dans la nature et dans les arts*, p. 31 note.)

² Professor R. C. Archibald, however, thinks that the name originated in the early part of the nineteenth century (in *Dynamic Symmetry*, p. 152, note 2).

³ The phrase 'extreme and mean ratio' is derived from Euclid's description how a line may be so divided. (See *Elements*, Book VI. Prop. 30. T. L. Heath's trans.)

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The straight line AB lies between the points A and B. From A construct a perpendicular AY to AB such that AY is half the length of AB. Join BY. On the line BY mark the point X so that $YX = YA$ ($= \frac{1}{2}AB$). On AB mark the point C so that $BC = BX$. The point C will then divide the line AB in extreme and mean ratio, or in the Golden Section. The ratio of AC to CB will be the same as the ratio of CB to the whole line AB.

$AC:CB::CB:AB$ and $AB = AC + CB$. (Fig. 2.)

The two lengths AC, CB and the two lengths CB, AB are not commensurable. That is, the ratio of AC to CB (which is the same as the ratio $CB:AB$) cannot be represented by a finite number. The ratio is $\frac{\sqrt{5}+1}{2}$ which, when worked out, is a recurring

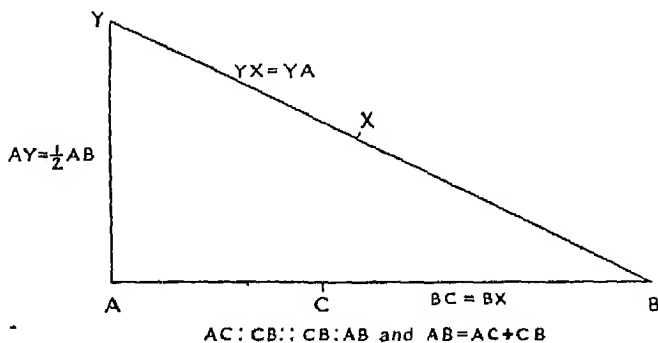


FIGURE 2

decimal number, 1.61803398875. . . . For this value Barr and Schooling first used the Greek letter ϕ as a symbol.¹ Hence

$$\phi = \frac{\sqrt{5}+1}{2} = 1.618. \dots$$

The ratio is extremely important throughout the historical investigation of proportion in aesthetics. Among the many peculiar properties of this number are the following: (1) If it is divided into unity the result is 0.618 ($1 \div 1.618 = 0.618$).² (2) If it is multiplied by itself the result is 2.618 ($1.618 \times 1.618 = 2.618 = 1 + 1.618$).³

¹ In *The Curves of Life* by Sir Theodore Cook.

² $\frac{1}{\phi} = \frac{\sqrt{5}-1}{2} = 0.618.$

³ $\phi^2 = \frac{\sqrt{5}+3}{2} = 2.618$

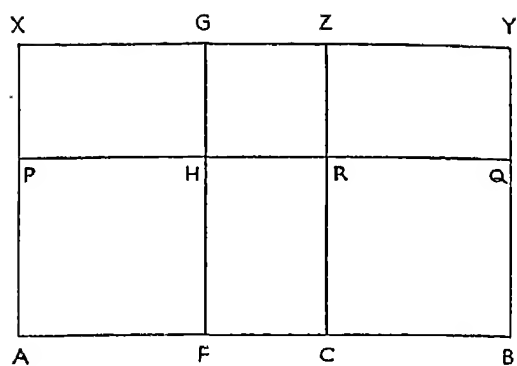


FIGURE 3

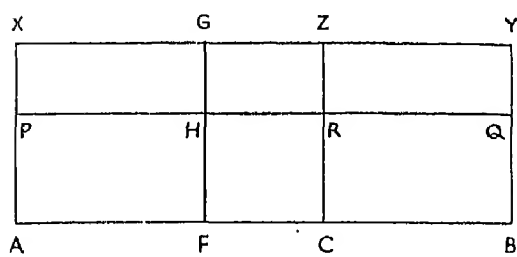


FIGURE 3a

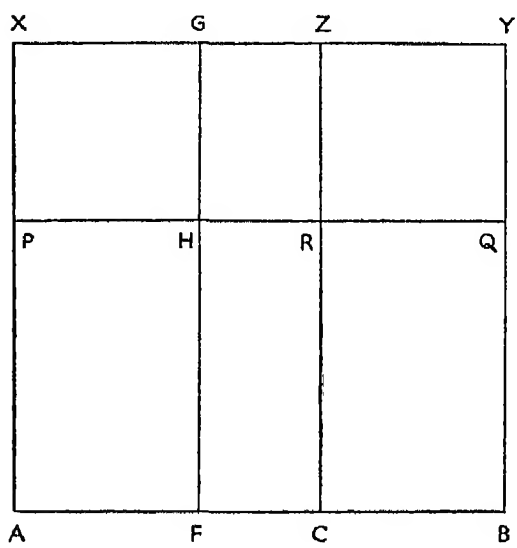


FIGURE 4

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Hence when AC (Fig. 2) = 1 then $CB = 1.618$. When $CB = 1$ then $AC = 0.618$ ($1 \div 1.618 = 0.618$. $\therefore 1 \div 0.618 = 1.618$). Again if the whole line $AB = 1$ then the larger segment $CB = 0.618$. If the segment $CB = 1$ then $AB = 1.618$. When $AB = 1.168$ and $CB = 1$ and $AC = 0.618$ then $AB:CB = 1.168$ ($1.168 \div 1 = 1.168$) and $CB:AC = 1.168$ ($1 \div 0.168 = 1.168$) and $AB = AC + CB$ ($1.168 = 1 + 0.168$).

It is possible to extend the application of the Golden Mean to areas as follows.—On a line ACB , where C is the Golden Section between A and B , such that $AC:CB::AB:AC$, construct perpendiculars at A , B and C . In order to retain the proportion the perpendiculars must be equal in length to AC , CB or AB .

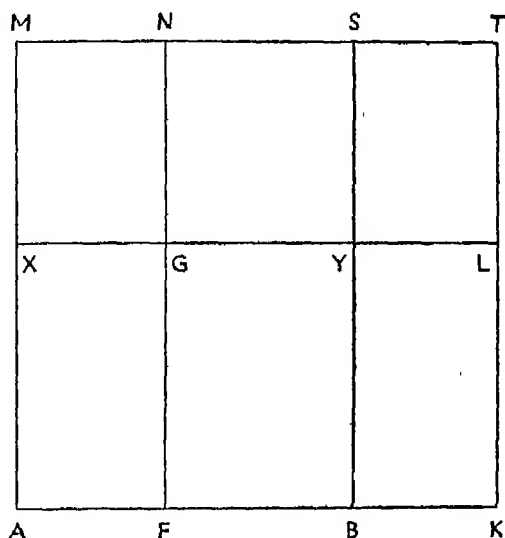


FIGURE 5

1. Let the perpendiculars be equal in length to AC and terminate at X , Z and Y . Join XZY (Fig. 3). We now have a rectangle $AXYB$ cut by a perpendicular CZ which divides AB and XY at the Golden Mean. $AXZC$ is a square ($AX = AC$ by construction), and $CZYB$ is a rectangle whose sides are to each other in the Golden Ratio ($AC:CB = \phi$ and $ZC = AC$. $\therefore ZC:CB = \phi$). The complete figure $AXYB$ is a rectangle whose sides are to

each other in the Golden Ratio ($AB : AC = \phi$ and $AX = AC \therefore AB : AX = \phi$). Moreover the ratio between the total area $AXYB$ and the area of the rectangle $CZYB$ is the reciprocal of ϕ .¹ (Let $AB = 1.618$. Then $AC = 1$ and $CB = 0.618$. The total area $AXYB = 1 \times 1.618 = 1.618$. The area $CZYB = 1 \times 0.618 = 0.618$. And 0.618 is the reciprocal of 1.618 .)

Further, we may divide AX , CZ and BY at the Golden Mean and join the points of section P , R , Q . Then $CRQB$ is a square. $APRC$ and $RZYQ$ are rectangles whose sides are to each other in the Golden Ratio. And $PXZR$ is a new figure, similar to $APQB$, each of which may be divided into a square and a rectangle whose sides are to each other in the Golden Ratio. The figure may be further complicated by dividing AB again in the Golden Ratio inversely, so that $FB : AF = \phi$ ($AF = CB$). If a perpendicular FG is drawn to cut XY at G and PQ at H , then $HGZR$ is a square and $PH : PX = \phi$. Further proportions and divisions may be worked out at will.

2. The perpendiculars are to be equal in length to CB (Fig. 3a). The complete figure is similar in all respects to $APQB$ in Fig. 3. $CZYB$ is a square and $AXZC$ is a ϕ -rectangle. $AXGF$ is a square and $FGZC$ is a ϕ -rectangle. If $PHRQ$ cuts the perpendiculars in the Golden Ratio $FHRC$ is a square, $HGZR$ is a ϕ -rectangle and $PXGH$ and $RZYQ$ are rectangles similar to the rectangle $PXZR$ in Fig. 3.

3. Let the perpendiculars be equal to AB . Then $AXYB$ (Fig. 4) is a square. $AXZC$ is a ϕ -rectangle. $CZYB$ is composed of a square $RZYQ$ and a ϕ -rectangle $CRQB$. $APRC$ is a square. And $PXZR$ is a ϕ -rectangle.

Proportion may also be maintained if the line AB is extended to K so that $BK = AF$ (Fig. 5). And in this way an ever increasing variety of constructions can be formed.

The mathematical speculations of the Renaissance reached their zenith in the grandiose cosmological extravaganzas of Kepler towards the end of the sixteenth century. From that time they gradually sank into oblivion or were noticed only as mathematical curiosities. The supposed aesthetic importance of the

¹ A reciprocal of any value is that value divided into unity. The reciprocal of $\phi = \frac{1}{\phi} = 0.618$.

Golden Ratio was first rediscovered by A. Zeising in the middle of the nineteenth century.¹ Zeising claimed that the Golden Section is the universal key to beauty in nature and in art. He undertook to show that it is the principle of the construction of human, animal and botanical forms. He finds it in painting, architecture and sculpture. The work of Zeising is more profuse than exact and has been repeated more scientifically and with better understanding in Sir Theodore Cook's *The Curves of Life*.

The theories of Zeising attracted the attention of Gustav Theodor Fechner, the pioneer of experimental psychology. Fechner tried to verify Zeising's assertion that the Golden Ratio is the source of beauty by measuring the more obvious divisions of famous pictures. He found that in general it was very difficult to decide what are the main divisions in a picture and that when he succeeded in determining them they did not manifest the Golden Ratio. In particular, Zeising had asserted that in the *Sistine Madonna* the group formed by the Madonna and the saints on either side is divided vertically in the Golden Ratio. Fechner took this to mean that the total length in question was the distance from the top of the Madonna's head to the feet of the saints and that the heads of the saints marked the Golden Mean. He found that this is not the case.

Instead of rejecting a theory which he had found impossible of verification Fechner determined to test it *experimentally*, that is under ideally simplified conditions. His problem was to determine whether proportion based upon the Golden Ratio is a necessary and sufficient condition of aesthetic beauty. The problem, he argued, would be simplified for experimental treatment if he could eliminate all irrelevant factors which influence response to complicated structures such as pictures and human figures. He therefore prepared a number of sets of very simple objects—rectangles, crosses, ellipses, etc. The objects were similar in size, material, etc., and varied only in their proportions. One member in each set exemplified the Golden Ratio. Thus he used ten rectangles of white cardboard each about ten square inches; they included one square and one rectangle whose sides were in the Golden Ratio. These he displayed to a large

¹ *Neue Lehre von Proportionen des menschlichen Koerpers*, 1854; *Aestetische Forschungen*, 1855.

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number of observers and asked them to state which member of the set they found the most pleasant. He treated the results statistically and assumed that the average of a large number of choices should give the aesthetic norm of good taste. He argued that the average would indicate the norm because deviations from the norm would be caused by casual and irrelevant influences (defective vision, associations, etc.) and these would fall with equal probability on either side of the norm and would tend to be fewer the greater the deviation. So, too, the deviations due to inferior taste would be, in probability, approximately equal on either side of the norm and would not affect the determination of the norm by taking the average among a large number of choices. Fechner's results were published in *Vorschule der Aesthetik* (1876) and he claimed that his experimental evidence was approximately consistent with the assumption that the Golden Ratio rectangle is the aesthetically perfect rectangle.

About twenty years later Fechner's experiments were repeated by Wittmer, a pupil of Wundt, who refined them by making some allowance for optical illusion. Wittmer found that regular figures (the square among rectangles and the circle among ellipses) stand out from all others.¹ He considered that his results established a region of maximum aesthetic pleasantness around the ratios $3/5$ and $5/8$ with simple figures but refused to assign any aesthetic importance to the exact Golden Section.²

R. P. Angier criticized the previous experimenters' use of statistical averages. Thus he found that the grand average of all his results was a point near to the Golden Mean. But this average was an imaginary choice only. The actual majority of choices were bunched at two points on either side of the grand average and the latter did not in fact correspond to a preference in choice. Angier also investigated the effect of more complicated visual effects, e.g. the substitution of a set of parallel wavy lines for one segment of a straight line to be divided. He concluded that even were it possible to establish preference for the Golden Ratio in simple objects, this result could not be accepted as valid for more complicated structures. His work is important as one of the early realizations of the importance of

¹ As had previously been noted by Zimmermann.

² *Philos. Studien*, IX, 1893.

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optical illusion and although very elementary, is enough to show that the results of mathematical theory and of experiment with ideally simplified objects could have no application to aesthetic objects unless after a very thorough investigation of optical illusion.

The experiments of Legowski (*Archiv. f. d. ges. Psych.*, 1908) and Thorndike (*Psych. Rev.*, 1917) tend to the view that simplicity and comprehensibility are the determining factors in the choice of forms.

The value of experimentation depends upon accurate assessment of the sort of result which the conditions of experiment are adapted to indicate. The idea underlying the above series of experiments is by simplification of stimuli to induce isolation of response. It was hoped that by eliminating every condition but pure ratio the response would be a pure aesthetic response to ratios. The general psychological dangers of this type of experimentation are set out with great penetration and lucidity in the first chapter of F. C. Bartlett's *Remembering*, which is a classic of sound methodology in psychology. It is not possible, he says, to control subjective response merely by controlling objective stimulus. 'There is only one way of securing isolation of response, and that is by extirpation or paralysis of accompanying functions. This is one of the perfectly legitimate methods of the physiologist. It can be argued that the psychologist, who is always claiming to deal with the intact or integrated organism, is either precluded from using this method, or at least must employ it with the very greatest caution.'

A more intimate examination of these experiments than can be given here would show that the main difficulty with which they all contend is the *absence* of any well-defined pleasure-response. If you have one of your friends set before you a number of rectangles of various shapes and try to decide which you find most pleasant, your unbiased conclusion will be that any one is much as pleasant as any other. Or you will instinctively ask yourself what they are *for*. If you think of them as models for visiting cards you will find that your preference is not the same as it will be if you think of them as models for playing cards. In the absence of a well-defined direct response such associative responses are very important factors in controlling choice.

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Or again, if you are asked to choose between a number of shapes to all of which you are equally indifferent, you will be apt to indicate any which are differentiated, for whatever reason, from the rest. The 'regular' shapes are simply the shapes which are most easily differentiated, which stand out to immediate perception, and this fact alone will influence choice.

Besides these methodological weaknesses, the conclusions drawn from experimentation of this type are vitiated on theoretical grounds. It has already been said that any purely objective analysis of formal beauty must be combined with a psychological explanation why we call this rather than that formal structure beautiful. It was the philosophic assumption of the Renaissance, inherited from the Greeks through a long tradition, that the æsthetic beauty to which fine art aspires is imitation, or reproduction in the artistic material, of 'ideal' or 'typical' forms, to which the actual things of nature are only imperfect approximations. It was assumed that the structure of the 'ideal' or 'typical' forms was perfect in the sense of being intellectually lucid or mathematically analysable. Hence a mathematical formula for artistic construction was assumed to be one by which the artistic construct would reproduce, more perfectly than natural objects, the structure of 'ideal' or 'typical' forms. The ideal structures were regarded as the unblemished embodiment of the Divine cosmological plan amidst a concrete world of imperfection. It was because they believed that the discoveries of mathematics would enable them to create more surely the beauty—reproduction of the 'ideal'—which they were already striving to create without the aid of mathematical principles that the artists of the Renaissance pursued these speculations with such fervour. That the mathematical path would, if it were made clear, enable the production of perfect æsthetic beauty, which already existed in the ideal, was an article of faith.

The theoretical assumption underlying the experimentation of Gustav Theodor Fechner and his successors is much more crude; it is the assumption that pleasantness to the senses is an adequate criterion of beauty. We have already shown reason to reject this assumption, as also the assumption that the beauty of a work of art can be expressed as a summation of the pleasurable of the parts of which it is composed. We have also maintained that

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a sound theory of aesthetics must provide some explanation of the belief that the judgments of trained and sensitive observers of works of art are more correct indications of beauty than the instinctive judgments of those who have no training or interest in the arts. It is obvious and undeniable that if you take a sufficiently large and varied survey of pleasure-response to works of art or pseudo-art, the majority average will not coincide with those objects which connoisseurs of the arts would claim to be most beautiful. The magazine art of our day, which is dictated by general demand, is sufficient evidence of this. The assumption that average pleasure-response to ideally simplified stimuli will be a genuine criterion of beauty, although average pleasure-response to more complicated stimuli is admittedly not a reliable criterion, is utterly unwarranted. Rather the reverse seems to be the case.

Even though a series of experiments was devised using only persons of known sensitivity and experience in the appreciation of art, and if they were requested to judge of simple forms not by their pleasantness but by their beauty, the results should be expected to be nugatory. We have shewn that aesthetic appreciation is the intense awareness of complex organic wholes, which are perceived as wholes involving a complex organization of subordinated parts which are themselves organic wholes one within another. The organic unity of the whole is perceived immediately in the act of apprehension and not by discursive understanding. And the special quality of such complex organic wholes as are called beautiful for perception is that they can occupy fully the attention and awake the perceptive faculty (whether vision or audition) to unusual keenness and alertness. But the rectangles, crosses, etc., used by Fechner and his successors have not sufficient complexity of structure to enable the visual attention to be concentrated upon them without the introduction of associative or theoretical factors. The aesthetic stimuli used in these experiments are so elementary, owing to the oversimplification of the 'material', as to be sub-liminal for all, or all but an abnormally sensitive, aesthetic sense and it is probable that no purely aesthetic response could be obtained from them. Jay Hambidge, who had, at any rate, familiarized himself with a large variety of rectangular shapes from the aesthetic point of

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view, writes: 'There is little ground for the assumption that any shape, *per se*, (he has in mind simple rectangular shapes) is more beautiful than any other. Beauty, perhaps, may be a matter of functional co-ordination.'¹

There is inadequate complexity for perception in constructions of this kind. The ϕ -rectangles may, it is true, be made almost infinitely complex theoretically; but for perception they remain monotonous combinations of shapes without sufficient variety to exercise attention. Our interest in them, if we are interested, is analytical and conceptual rather than perceptual. The aesthetic stimulus lies below the threshold of aesthetic awareness just as some sounds are below the threshold of auditory awareness.

According to our analysis, when we appreciate a picture we isolate a certain tract within the visual field, concentrate attention within the tract isolated, and become intensely aware of organic complexity within the tract. Now the rectangles used in the experiments provide a tract for isolation and give nothing at all to be observed within the isolated tract. They are the frames for pictures without any picture inside the frame. There can be no awareness aesthetically of an undifferentiated tract. The minimal aesthetic stimulus is some configuration *within* an isolated area (the rectangle) and bearing certain symmetrical relations to the total space which occupies attention. If, then, our view of aesthetic awareness has any truth, the experimental conditions in striving to achieve ideal simplification of aesthetic stimulus achieve only the annihilation of aesthetic response. The most elementary forms of visual art which I know are the works of the Suprematist School, Mondrian and Ben Nicholson. Although these artists use squares and circles, the square or circle is seldom geometrically perfect because a perfect square or circle has such prominence visually that it is very difficult to subordinate within a visual complex. The slight variations from the geometrically perfect circle or square in these pictures, while tending to reduce the visual prominence of these figures, also set up more subtle and complicated visual relations throughout the whole picture. Variations of surface structure in the 'vehicle' are also used to enhance or add to the visual complexity of these pictures.

¹ *Dynamic Symmetry*, p. 59

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It is stimulating to the complacency which is one of life's chief comforts when we can jettison with a fine careless gesture the cherished creeds of ages past. The hopes and the ambitions, the mystical fervour and the devotion which were enlisted by the Divine Section are nowadays regarded as little different from the calamitous superstitions of the Philosopher's Stone and the Elixir Vitae. The Renaissance had awakened to aesthetic consciousness; men became consciously obsessed with the endeavour to create things of beauty and not, as before, simply pictures, statues, and so on, for an ulterior purpose. We have now lost the Renaissance faith in ideal forms which had reality more ultimate than that of sensible things but which were nevertheless reproducible by the artist. Over the whole realm of fine art we are compelled to seek some principle of objective beauty superimposed on the whimsies of individual taste and the variations of artistic style and tradition. Hence in our era the first stirrings of an awakening to aesthetic selfconsciousness, symptomatic of which is the tendency to create non-representational plastic art. It is with no thought to rehabilitate an outworn superstition, and entirely without superstition, that we suggest that the researches into the Divine Proportion may still have some value as an indication towards an objective principle of beauty.

Gestalt psychology has shown that awareness of elementary patterns or configurations is direct and immediate in perception. We do not mentally construct these configurations from their constituent elements previously perceived in isolation; theoretical analysis is subsequent to awareness of the configuration as a unitary whole. From our analysis of aesthetic awareness we saw that in order to be a possible object of appreciation—a thing of beauty—any object of perception must be so welded into a single configurational whole, a unity prior to the sum of its parts, that it can be perceived directly as a unity, as individual and unique. 'A real harmony linketh together things unlike.' The Divine Proportion is a very special sort of complex to theoretical understanding. Visually also one would expect that the Golden Section would lead to the emergence of perceptual configurations. For when a line is so divided there is a repetition of ratio between the two segments and between one segment and the whole and the reduplication of the ratio *fixes* all three points of the line. Were

the line extended at either end, or were the dividing point moved, a new set of ratios would emerge but there would be no duplication of ratios.

Theoretically one might expect that this fact of repeated ratios should be directly apprehensible in perception. I do not mean that a person observing a line divided in extreme and mean ratio would be theoretically aware that the ratio $AC:CB$ was identical with $CB:AB$. Such awareness could only be the result of later analysis. But we might expect him to be aware of an elementary configuration, *seen as one*, and such that if anything were altered the unity would be destroyed. As the experiments of Fechner and others have shown, this does not occur. It does not occur because the configuration is too elementary; the aesthetic stimulus is subliminal. And in a more complicated configurational construct where beauty is aesthetically perceptible, owing to the influences of optical illusion, the mutual interaction of the parts and the influence of the whole on all contained configurations, what would be optically a Golden Section division would not be measurably so in the vehicle. Yet as a principle, though not measurable, the Divine Proportion may be a basis of the symmetry which makes the configurational organic unity, or beauty, of a work of art.

It should be remarked as a precaution that even though the Divine Proportion should have this importance as a principle of objective beauty, it would not follow that objective beauty is measurable. For beauty lies in the sensed *material* of a work of art (sets of sensations) and not in the vehicle and there is not a one-one relation between the material and the vehicle. The facts of what has been called 'optical illusion' indicate that the visual length of a line in an enformed visual field depends upon its position and the relations in which it stands to other parts of the field (at its simplest, vertical lines are visually shorter in relation to horizontal lines in the same field than their mathematical relation in the vehicle) and a coloured patch in an enformed visual field depends for its size, shape and colour (hue, shade, saturation) upon its relations to other coloured patches in the same field. The facts of so-called optical illusion are very complicated, but we may say that *visually* no element in or part of an enformed field is what it is except in virtue of all the rela-

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tions in which it stands within the field.¹ When we say that a work of art is a single complex organic whole, we *mean* that the parts are what they are in virtue of the whole of which they form parts. Visually this is literally and not only metaphorically true. Thus as a work of art is better and better known through repeated observation it is not only the whole which is seen as more complex, it is not only new relations among the parts which begin to be observed, but the parts themselves become visually different in virtue of the new relations in which they are now seen to stand. This is why measurement or mathematical analysis of the vehicle can never bring to light the relations of proportion inherent in the work of art. The same thing is true of musical art; there is not a one-one relation between the physical air waves and the perceived sounds when a musical composition is fully heard and appreciated and each sound-element is what it is only in virtue of its position within the apprehended whole.

2. SYMMETRY

'The design of a temple depends on symmetry, the principles of which must be most carefully observed by the architect. They are due to proportion. Proportion is a correspondence among the measures of the members of an entire work, and of the whole to a certain part selected as standard. From this result the principles of symmetry. Without symmetry and proportion there can be no principles in the design of any temple; that is, there is no precise relation between its members, as in the case of those of a well-shaped man.'² Vitruvius, who was rehashing in ill-defined terminology a theory which he had imperfectly understood, became for more than a thousand years the Bible for studio traditions and for speculation in architecture. The notions of 'symmetry' and 'pattern' in connection with the idea of 'proportion' have been re-studied more recently, but little has resulted of importance for aesthetics until the rediscovery by Jay Hambidge

¹ For this reason attempts to measure or plot the construction of pictures without reference to the effect of colours upon the seen spatial relations can never reveal beauty or organic wholeness. At best they can rediscover the constructional schema employed by the artist, if he used a schema.

² Vitruvius, III, 1. M. H. Morgan's translation.

of methods of symmetrical construction employed by early Mediterranean artists.

In his lectures on the *Principles of Symmetry* (1917), which is one of the best introductions to this subject, Professor F. M. Jaeger says: 'By the use of the word "symmetry" in the study of forms and figures it is intended to draw attention to some *geometrical regularity*, to a certain *process of repetition* which manifests itself in the external habit of the figure considered.' His exact definition is as follows: 'Symmetrical figures are such as are similar to themselves or to their mirror-images in more than one way.'¹ This property of geometrical repetition is, however, more akin to what is called *pattern* in the studies of morphology, crystallography and decorative art. Visually the pattern-element is seen with immediacy as a configuration and its repetition at more or less regular intervals is recognized discursively and intellectually. Aesthetically such patterns are very elementary. The aesthetic attention is assured by the immediate intuition of the 'pattern-element in repetition' but the aesthetic stimulus is not powerful enough to carry prolonged or intense exercise of the visual faculty. Such visual forms are adequate to arouse attention and to serve as 'background', but are not adequate to the full concentration, objectivity and distance which characterize complete aesthetic awareness. They are suitable to the decorative needs of carpets, textiles, wallpapers, etc. It is noticeable, however, that in fine decorative art produced by craftsmen rather than with mechanical methods of reproduction (e.g. Persian carpets, Inca textiles, Byzantine mosaics) the pattern elements while remaining recognizably the same to immediate vision are subjected to variations of colour or design and conscious irregularity is often introduced into the regular geometrical repetition of the pattern-element. In Inca textiles the pattern-element, which may be a stylized animal or head, is often repeated upside-down or sideways. The slight deviations from strict regularity of repetition that characterize all good decorative art introduce an additional element of variety which offers fuller scope for aesthetic vision. The constant repetition of a rhythmic or melodic theme in primitive or barbaric music is analogous to pattern repetition

¹ Op. cit., p. 10. See also A. Speiser, *Theorie der Gruppen von endlicher Ordnung*, especially Chapter 6.

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in decorative art. It soon becomes monotonous and boring or else the objectivity and detachment of aesthetic contemplation are submerged by the impulse to physical activity in dance.

In unreflective aesthetic doctrine a shape or design is said to be symmetrical if it is structurally similar on either side of a medial axis. In this sense a symmetrical structure is formed when any shape or design is conjoined with its own mirror image.¹ So defined symmetry is not a property of objective beauty. Symmetry in the aesthetic sense belongs to a composition as a whole, in its parts as well as in the sum of the parts. It involves the organization of the parts in organic configurations of ascending and descending complexity through the application of constant principles of proportion. The conscious 'asymmetry' of Baroque art does not involve less symmetry in this sense than the more obvious classical style. In this sense symmetry has often been spoken of more vaguely as 'harmony'. Thierry's statement that 'L'harmonie résulte de la répétition de la forme fondamentale de l'oeuvre dans ses sub-divisiones' is nearer to what we mean but is too mechanical. In this sense Vitruvius spoke of *commodulatio* and Alberti of *concininitas* and in *The Testament of Beauty* Robert Bridges revives the lovely old word 'concinuity'. Plotinus approached this idea—though he characteristically implied a different criterion of beauty in respect to colour—when he said: 'Now almost by all persons it is maintained that it is the *symmetry* of the different parts with respect to each other, and the beautiful colour, which produce beauty for visual observation—beauty is identical with symmetry and being shaped after fixed proportions.'² But the logical analysis of this notion of symmetry, or harmony, has not progressed far beyond Dürer's: 'The accord of one thing with another is beautiful, therefore want of harmony is not beautiful. A real harmony linketh together things unlike.'

3. DYNAMIC SYMMETRY

The word 'symmetry' in Greek means 'commensurability'.

¹ 'We have most of us been taught that symmetrical design consists of the exact countering of an arrangement about an axis, so that each side is the same as the other reversed.' Maxwell Armfield, *Papers of the Society of Mural Decorators and Painters in Tempera*. Vol. III, p. 41.

² *Ennead*, VI, Chapter I.

Any two magnitudes are commensurable if there exists a third magnitude which can be divided without remainder into both of them. Thus all integral numbers are commensurable because the unit of number can be divided without remainder into them all. The diameter of a circle is incommensurate with its circumference because there is no unit of length which can be divided without remainder into both the diameter and the circumference. It is important to realize that *in origin* the idea of symmetry was nothing more than the idea of commensurability. But the ancients approached the problems of symmetry differently from us because they instinctively thought in terms of areas while we think in terms of linear magnitudes. The modern tendency is to compare length-ratios in the various senses (vertical, horizontal, etc.) in a pictorial design. The ancient conceived symmetry as commensurability among areas. The ancient Egyptian, Indian or Greek when planning a design thought *directly* in terms of commensurate areas and was interested in linear magnitudes only secondarily, as the edges and bounds of his commensurate areas. The modern thinks directly of linear ratios and secondarily, by calculation, of commensurability among areas. We are arithmetically minded; the ancients were geometrically minded.

A composition is symmetrical if its constituent parts are all in a common proportion to each other and to the whole, the whole being the total area of the visual field occupied by the composition (e.g. the area bounded by the inner edge of the frame or mount of a picture). From the ancient or geometrical point of view the most elementary problem in symmetrical design is to divide a given rectangle without remainder into rectangles of similar form to itself. (The *form* of a rectangle is indicated by the ratio between the lengths of its sides and can be represented by the number which expresses this ratio.) This may be done for any rectangle by dividing its sides into any number of parts—every side being divided into the same number of parts—and joining the corresponding points on opposite sides (Fig. 6). Such division may be continued indefinitely on the same principle, the number of linear divisions remaining constant. The number of rectangles obtained by each operation is the square of the number of linear divisions used and the rectangles all lie in the same direction. This method of division may be named paratactical

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in contrast to the syntactical method to be described. It has no aesthetic value, although it has a certain bearing upon the 'symmetry' of pattern design.

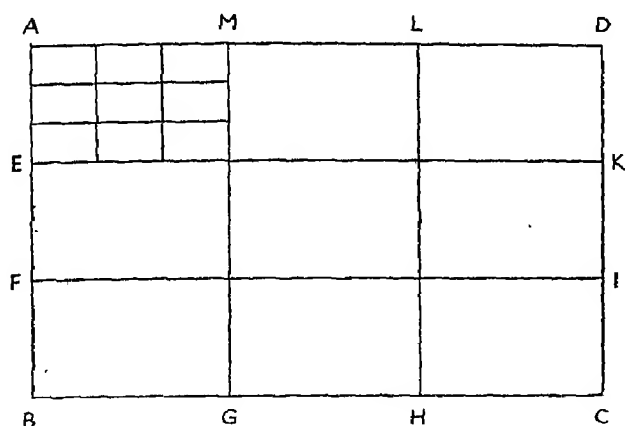


FIGURE 6

The problem as it presented itself in antiquity was to divide a rectangle without remainder into rectangles similar in form to the initial rectangle, so that the longer sides of the inscribed rectangles shall be equal in length to the shorter sides of the initial

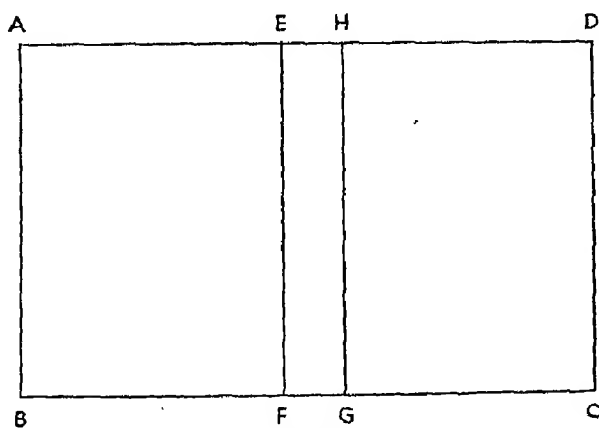


FIGURE 7

rectangle. In Fig. 7 ABFE and GCDH are rectangles similar in form to ABCD and their longer sides are equal to the shorter sides of ABCD; but FGHE is a 'remainder', and therefore the problem has not been solved. The two rectangles ABFE and HGCD are called *reciprocals* of the rectangle ABCD. (In mathematics the reciprocal of any number is unity divided by that number. Since $AB:BF = BC:AB$, $AB:BC = 1 \div AB:BF$. That is, the ratio between the sides of the inscribed rectangles is the reciprocal of the ratio between the sides of the initial rectangle.) Hence the problem is to divide a given rectangle into reciprocals of itself without remainder. This is only possible in the case of rectangles whose form (the ratio between the sides) is expressed by a square root. In the majority of these rectangles the lengths of the sides are incommensurate. Fig. 8 shows these rectangles and their division up to the root-5 rectangle. They include the square and the double square.

This system of analysing rectilinear surfaces is descended from the practical methods of construction employed by temple builders of almost incalculable antiquity. Their fundamental problem seems to have been the construction of a square whose area should be a given multiple of a unit square. This involves the employment of incommensurable lengths and is a geometrical problem of some complexity. *Why* the primitive architect should have worked in this way is comprehensible only if one recognizes that his mind, working with surfaces, thought in terms of surfaces and not lines. To us it seems natural, and is easier, to think in terms of linear magnitudes and to calculate areas arithmetically. But arithmetical knowledge was secondary in order of development to geometrical knowledge and the geometrical demands made upon the primitive architect were far in advance of the arithmetic of his day. Hence he sought to solve his problems of the analysis and construction of surfaces directly instead of indirectly by arithmetic. It is also to be remembered that very great accuracy was demanded, since a slight error in the initial planning of a large structure would develop and multiply into serious mistakes as the building progressed. This meticulous accuracy had, moreover, to be achieved without any of the complicated and refined measuring tools which are in use to-day. The planning of structures was a specialized craft endowed with,

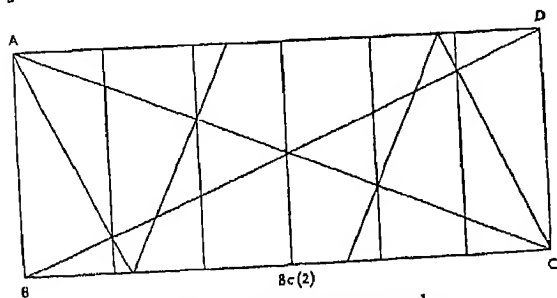
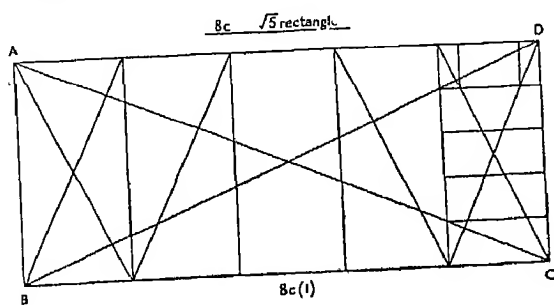
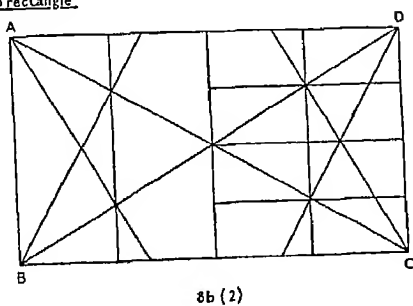
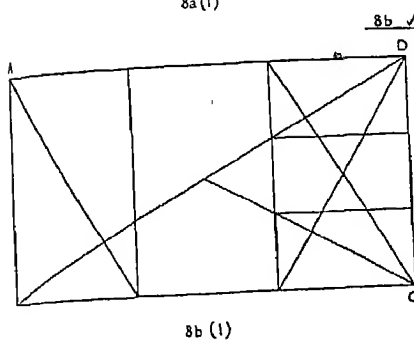
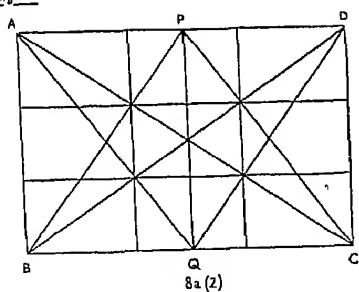
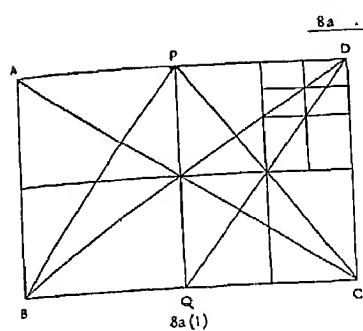


FIGURE 8. The Root Rectangles

religious significance. In Egypt this was the craft of the Harpedonapt (Greek: 'Rope-stretcher'). The Hindu word is *Sulvasutra* which means 'rules of the cord'.

It may be interesting, and will help towards understanding the ancient idea of symmetry, to indicate briefly the probable development of this craft. The first step of all is the construction of a right-angle, for this is essential to the construction of any rectangular figure. This problem was solved by the discovery of the triangle whose sides are in the ratio 3:4:5. This triangle, as every schoolboy learns with tears, contains a right-angle between the 3 and 4 sides. It was constructed as follows. A piece of cord was prepared divided into twelve equal sections and knotted at two points C and D so that AC = four sections, CD = three sections and DB = five sections. The rope was then pegged to the ground at C and D. The two ends (A and B) were then brought round until they met at the apex of a triangle and a third peg was fixed at this point. Then AC was at right angles to CD.

The next problem was to construct squares which should be commensurate with a given square. The reason for the choice of the square may have been partly religious or semi-religious reverence for the most 'regular' rectilinear surface. But the practical motives would be sufficient in themselves and were certainly paramount in determining this choice. For the square enters as an essential element in the analysis of rectilinear surfaces and, as was discovered by experience, in the solution of the problem of constructing commensurate squares the 'root-rectangles', which alone can be divided without remainder into their reciprocals, are formed. Two lines at right-angles to each other have been constructed. These may be extended to any length required—AX, AY (Fig. 9). On AX and AY mark off equal lengths AB and AC. If cords of equal length to AB and AC are pegged at B and C and drawn tight they will meet at D and ABDC will be a square. In order to form a square which shall be twice as large as ABDC it is necessary to mark on AX a distance AF equal in length to CB, the diameter of the square ABDC. The square with side AF will be twice the square ABDC. The square whose side is the diameter CF will be three times as large as ABDC. Let its base be AG. Then CG gives the base of a square four times as large as ABDC. Let AH be its base. Then

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CH gives the base (AK) of a square five times as large as ABDC.

If CD is extended beyond D to cut the verticals to the points F, G, H, K at P, Q, R, S, the root-rectangles are formed (see Fig. 9). Thus the diagonals of the root-rectangles give the bases

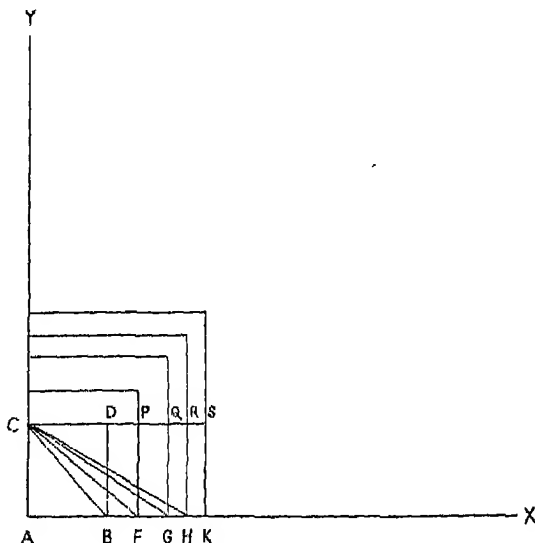


FIGURE 9

$AB=AC=1$. $ABDC$ =unit square.

$AF=CB$. Square on $AF=2 \times ABDC$.

$AG=CF$. Square on $AG=3 \times ABDC$.

$AH=CG$. Square on $AH=4 \times ABDC$.

$AK=CH$. Square on $AK=5 \times ABDC$.

$ABDC$ =Square.

$AFPC = \sqrt{2}$ rectangle [$CB=AF=\sqrt{1^2+1^2}=\sqrt{2}$; $AC=1$].

$AGQC = \sqrt{3}$ rectangle [$AG=FC=\sqrt{1^2+\sqrt{2}^2}=\sqrt{3}$; $AC=1$].

$AHRC = \sqrt{4}$ rectangle [$AH=CG=\sqrt{1^2+\sqrt{3}^2}=\sqrt{4}$; $AC=1$].

$\sqrt{4}=2$. Hence $AHRC$ =double square $ABDC$.

$AKSC = \sqrt{5}$ rectangle [$AK=CH=\sqrt{1^2+\sqrt{4}^2}=\sqrt{5}$; $AC=1$].



of commensurate squares. The fact that these rectangles are divisible without remainder into their own reciprocals, together with the fact that they are formed in the construction of commensurate squares, makes them the most comprehensible and

workable of all rectilinear figures for people who think in terms of shape and area rather than in terms of linear magnitude.

The Greek habit of thought retained this geometrical character. They thought in terms of areas; therefore whereas we regard the roots as irrational numbers, because they are linearly incommensurable, the Greeks thought of them as rational numbers because they represent rectangles the squares on whose sides are commensurate in area. Mr. Jay Hambidge, who is mainly responsible for the rediscovery of this habit of thought, writes: 'We find the Greek point of view essentially different from ours, in considering areas of all kinds. We regard a rectangular area as a space enclosed by lines, and the ends and the sides of the majority of root-rectangles, because these lines are incommensurable, would now be called irrational. The Greeks, however, put them in the rational class, because these lines are commensurable in square. This conception leads directly to another Greek viewpoint which resulted in the evolution of a method employed by them for the solution of geometric problems, to wit, "the application of areas". Analysis of Greek design shows a similar idea was used in art when rectangular areas were exhausted by the application of other areas, for example, the exhaustion of a rectangle by the application of the squares on the end and the side, in order that the area receiving the application might be clearly understood and its proportional parts used as elements of design.' (*Dynamic Symmetry*, p. 19.)

The *locus classicus* in Greek literature occurs near the beginning of Plato's *Theaetetus* (147D-148B).

THEAET. Theodorus here was proving to us something about square roots, namely, that the sides (or roots) of squares representing three square feet and five square feet are not commensurable in length with the line representing one foot; and he went on in this way, taking all the separate cases up to the root of seventeen square feet. There for some reason he stopped. The idea occurred to us, seeing that these square roots were evidently infinite in number, to try to arrive at a single collective term by which we could designate all these roots.

SOC. And did you find one?

THEAET. I think so; but I should like your opinion.

SOC. Go on.

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THEAET. We divided number in general into two classes. Any number which is the product of a number multiplied by itself we likened to a square figure, and we called such a number 'square' or 'equilateral'.

SOC. Well done!

THEAET. Any intermediate number, such as 3 or 5 or any number which cannot be obtained by multiplying a number by itself, but has one factor either greater or less than the other, so that the sides containing the corresponding figure are always unequal, we likened to the oblong figure, and we called it an oblong number.

SOC. Excellent; and what next?

THEAET. All the lines which form the four equal sides of the plane figure representing the equilateral number we defined as *length*, while those which form the sides of squares equal in area to the oblongs we called '*roots*' (surds), as not being commensurable with the others in length, but only in the plane areas to which their plane areas are equal. And there is another distinction of the same sort in the case of solids. (Translation by F. M. Cornford, *Plato's Theory of Knowledge*, pp. 22-3.)

It was this passage which led to the recovery by Mr. Jay Hambidge of the ancient method of structural design, by the use of commensurate areas involving incommensurate lengths. This discovery has been described as the most important thing which has happened in the history of aesthetics for many generations, and the claims which are made for it that it is a key to the production of beautiful artistic compositions must receive very careful consideration. The essentially original part of Mr. Hambidge's discovery is not the use of incommensurate lengths but his recovery of the geometrical habit of thought, the use of surfaces incommensurate in length and commensurate in area.

In Mr. Hambidge's terminology any design is symmetrical if it is constructed from commensurable areas and he reduces all design to rectilinear design. He distinguishes two classes of symmetrical design. Designs which are composed in commensurate areas and which involve also linear commensurability among the lines by which these areas are bounded are said to display 'static' symmetry. Designs which are composed in commensurate areas which are incommensurate of line are said to display 'dynamic'

symmetry. Mr. Hambidge considers that dynamic symmetry alone has aesthetic value or at any rate that it has very much greater aesthetic value indeed than has static symmetry.

After his discovery of dynamic symmetry Mr. Hambidge devoted himself to the task of verifying its use by the Greek and Egyptian artists. With the aid of collaborators he measured a very large number of Greek vases, which he believed to be the most suitable material for investigating the application of dynamic symmetry. With pottery he included measurements of architecture, statues, reliefs, etc. His method was to outline the silhouette-shape of a vase in two dimensions, draw the rectangular shape which encloses the overall area occupied by the silhouette, and analyse this rectangle by the Greek method of the 'application of areas' which has been demonstrated. He found that in the vast majority of cases the rectangles involved are the root-rectangles or rectangles composed from them and their constituents in 'dynamic' analysis, and he concluded that these rectangles and dynamic symmetry are characteristic of the 'best period' Greek art and of Egyptian art. Since the death of Mr. Hambidge in 1925 his work has been carried on and extended by Mr. Caskey and many other workers. An enormous wealth of material has been amassed, together with some evidence that dynamic symmetry is to be found in the art of other nations than the Egyptians and the Greeks, contrary to the belief of Mr. Hambidge.

It remains to decide whether the advocates of 'dynamic symmetry' have discovered a universal principle of beauty or whether they have only rediscovered a studio-tradition or rule of craftsmanship belonging to a limited period of artistic creation.

Dynamic symmetry was first and most thoroughly worked out in relation to Greek vases. Now a vase is a solid object which, like a sculpture, is made to be seen from all angles. It may be so constructed that the view from all sides is as far as possible the same (this method is used for the most part in Greek vases and involves symmetry in the narrow sense of equal structure about a median axis for each possible view); or it may be constructed, as a statue is constructed, with the purpose of providing a number of subtly differing views which can then be

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reconstructed by the observer imaginally. The latter method is responsible for the subtle variations in the line of Chinese vases and involves 'assymetry' (in the narrow sense of the word) for each separate view. While the principles of dynamic symmetry are applicable to Greek vases of symmetrical construction, they are not applicable to explain the subtle variations from strict symmetry which determine the characteristic and superior aesthetic beauty of Chinese, or even of Peruvian ceramics. Even within the narrow field of Greek vases dynamic symmetry cannot explain why one is more beautiful than another. In his book, *Dynamic Symmetry*, Jay Hambidge reproduces photographs of a number of vases, all of which are shewn to be analysable within very small limits by dynamic symmetry. Yet to the trained aesthetic judgment the shapes reproduced vary in their degree of aesthetic excellence.

Vases provide a particularly convenient art-form for objective measurement because they are made to be seen from many different points of view and for this reason the effects of optical illusion are neglected. But a picture is to be seen one way up only and from a more or less specific point of view. The attempt to analyse pictures by dynamic symmetry or to use dynamic symmetry as a method for construction of pictures must therefore necessarily fail. If a picture were constructed according to the exact principles of dynamic symmetry, the resultant set of *sensa*, or *seen picture*, would not be in accordance with those principles. And the variations due to optical illusion are neither fixed nor measurable.

Plainly all attempts to *measure* beauty, and still more to create beauty, mathematically have proved abortive. There should be no tampering with this conclusion. For a proper understanding of what a work of art is, and what appreciation of its beauty is, shows plainly that such attempts to measure objective beauty must necessarily be abortive. A work of art is a particular and individual configuration in apprehension; though we could measure the physical object which is the perduring vehicle of such a perceptual configuration, we cannot measure the stuff of perceptual experience itself. It is not only that there is not a one-one correspondence between physical stimulus and resultant perception—we might eventually be able to measure those

divagations between stimulus and perception which are spoken of as optical or aural 'illusion'. It is because each separable item is what it is perceptually because of the total configuration of which it is a part. Each separate part of the total perceptual experience is what it is as organic to precisely that whole in which it occurs; if you separate it, it loses that character which it had as part of that whole and becomes perceptually something else. As each work of art is a single all-embracing configuration—this is why we call it a work of art, a thing of beauty—it cannot be analysed or split up into parts without destroying both its configurational unity and changing the parts which are isolated from the whole. Measurement is the isolation of the parts in order to compare the relations in which they stand to one another discretely. Hence by measuring you change what you set out to measure and the more minutely you measure, the greater the change. The result of measurement does not give the unity with which you started because in the process of itemization the items have become what they were not.

The study of aesthetics must be phenomenological. It is also certain that whatever we mean by beauty we do not simply mean mathematical lucidity. Nor can we any longer accept the metaphysical basis for those aesthetic theories which maintained that beauty is a mathematical proportion; we can no longer accept that artistic beauty is a copy of ideal metaphysical entities of which we can have no knowledge except through the copy. We hold that the type of configurational whole which we call a work of art is beautiful because it has the power to activate to an exceptional degree some skilled perceptual faculty and heighten the intensity of consciousness through the faculty that is activated.

But because objective beauty is not measurable we are not driven back to a subjective theory of beauty. We know that beauty is a quality of perceptual configurations of a special kind, but it is not constituted either by 'normal' emotional reactions or by the vagaries of individual emotional taste. The very argument by which beauty is shewn to be unmeasurable is based upon the presupposition that beauty is objective.

CONCLUSION: SUMMARY OF ARGUMENT

1. Aesthetics is a branch of critical philosophy. Its purpose is to understand what is meant by judgments involving the notion of 'beauty'. Its data are provided by the practical appreciation of art recorded in art criticism but it is not itself normative and does not evaluate the specific beauties of particular objects of beauty.

Its scope is defined by the initial definition of beauty as the 'characteristic and peculiar excellence of works of art'.

2. Logical analysis of the notion of beauty and of the meanings contained in actual beauty judgments brings to light only a chaotic medley of alien and disconnected notions and gives the impression that what is called the science of aesthetics is no more than a muddled amalgam of other sciences. Owing to the impossibility of knowing at the outset whether any instance of the class of putatively beautiful things is really beautiful or not, the empirical investigation of an objective beauty-property must depend upon logical analysis or upon psychological investigation of appreciation for the initial assumptions which are necessary to the demarcation of its field of investigation. The study of appreciation by empirical psychology is confronted with an analogous problem. It cannot decide empirically what are and what are not genuine instances of aesthetic appreciation. Either it reduces beauty to subjective reaction and thus rejects the possibility of an independent science of aesthetics; or it must discriminate genuine from spurious instances of appreciation by the veridical character of the former and so fall back upon the empirical investigation of an objective beauty-property for its criterion.

The dilemma can be solved only if psychology finds a unique kind of mental attitude or activity, which coincides more or less with what we are prepared to recognize as genuine instances of

CONCLUSION: SUMMARY OF ARGUMENT

appreciation, and if the empirical investigation of objective beauty finds a unique kind of objective property which coincides more or less with the class of putatively beautiful things which are the objects of these appreciations.

3. The assessment of works of art by moral or social standards is legitimate but beyond the province of aesthetics, which evaluates them by autonomous standards of beauty—or is reduced to a branch of sociology and ethics. As a corollary aesthetics is concerned with formal beauty rather than with greatness of theme in terms of human and social values.

The conception of imitative realism is inadequate as a principle of beauty and metaphysical theories of imitation involve postulates which, if true, could not be known. As a corollary the notion of artistic beauty is logically prior to the notion of natural beauty for aesthetics.

4. Psychological theories which postulate that appreciation of beauty involves a unique mental state may, but need not, hold a subjective-relational theory of beauty. It is more reasonable for such theories to postulate an objective non-relational beauty-property as a hypothesis to be investigated.

When we consider the chaotic conflict among existing beauty judgments, which besides causing methodological difficulties in aesthetics has been considered a sufficient refutation of an objective theory of beauty, we must reject as irrelevant all beauty judgments which are in fact about anything other than an objective non-relational property of structure. For if there is an objective structural beauty property, all judgments about something else are irrelevant to the theory of beauty. It is to be considered whether such objective judgments upon investigation show sufficient agreement to make feasible the study of objective beauty.

An objective theory of beauty implies that appreciation is cognitive in character or a mode of intuitional awareness.

5. A work of art is not a material thing but an enduring possibility, often embodied or recorded in a material medium, of a specific set of sensory impressions, which is characterized by what we call beauty.

A set of sensory impressions characterized by beauty is an organic whole of considerable complexity, the constituent parts

CONCLUSION: SUMMARY OF ARGUMENT

of which are interpenetrating organic wholes. Its perception is not automatic. Of many persons subjected to the set of stimuli which represent a work of art some will, and some will not, experience the set of impressions which is the work of art.

6. The nature of aesthetic appreciation is such that it can only be experienced towards an object which is an organic whole of a high degree of complexity. An organic whole is a configuration which is not an additive resultant of its parts and the relations between its parts but a prior configurational unity such that the parts are what they are in virtue of the whole of which they are parts. The parts of an organic whole may themselves be organic wholes.

A work of art is an organic whole of interlocking organic wholes at many various levels of analytical complexity. It is appreciated intuitively as unique and individual, not by analysis and discursive synthesis of the theoretical reason.

In aesthetic appreciation a perceptive activity functions at exceptionally high intensity and provided that the object is adequate to sustain attention, consciousness through the activated perception is stimulated to exceptional vivacity. In this we find the source of the *value* attached to appreciation of beauty.

Particular emotions may incidentally be stimulated in the course of appreciation. But it is necessary to distinguish 'reverberated' emotions due to sympathetic activity when the object of appreciation contains represented emotion from directly stimulated emotions.

7. Attempts to measure beauty with a view to discovering a mathematical formula of beauty have been unsuccessful. They must necessarily fail owing to the absence of a one-one relation between the physical 'vehicle' (which alone is measurable) and the sensory 'material' (which alone is perceptible) of a work of art, and because a configurational unity is destroyed when you itemize it into its constituent parts and the relations between its parts. Hence the failure of measurement is not a reason for doubting the existence of objective beauty.

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¹ These titles have been chosen in some cases because of their intrinsic importance and in others because they are typical of a particular point of view or period. No attempt has been made to cover literary criticism or to give more than a few outstanding works on the particular arts.

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